Issue 110
PS
1962 Series
THE
PREVENTIVE
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MEDICAL EQUIPMENT PM
SEE PAGE 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
OFFICE OF THE SURGEON GENERAL
WASHINGTON 25, D.C.

IN REPLY REFER TO
MEDAS-T

26 September 1961

The Editor
PS Magazine
Raritan Arsenal
Metuchen, New Jersey

Dear Sir:

Preventive Maintenance means a great deal to all of us--as individual soldiers or officers or as commanders of military units--because it is the key to functioning mobility, communications and firepower. Our care of medical equipment has the added significance of the personal need we all may have for it at some critical moment.

We of the Army Medical Service are highly pleased at this opportunity to participate with the other Technical Services, because we know the way your publication is enthusiastically received and used by the troop units.

Since PS Magazine is written for and by the individual, I urge every soldier to contribute his ideas and problems on maintenance of medical equipment to the Editor of PS Magazine.

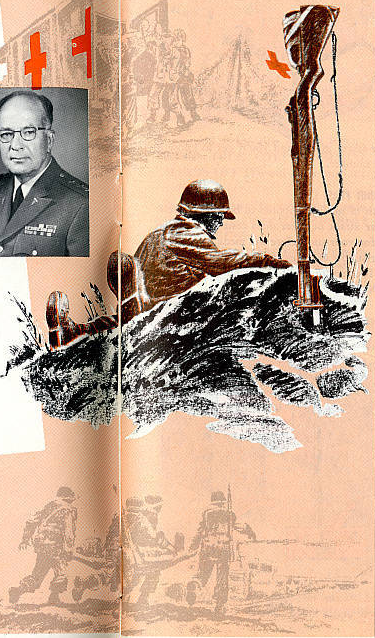
We are looking forward to seeing tips on medical items in PS.

When it comes to medical materiel, I would like to add a phrase to your widely known motto: "We Have the World's Best Equipment--Take Care of It", . . . because it can take care of you.

Sincerely,

Leonard D. Heaton

LEONARD D. HEATON
Lieutenant General
The Surgeon General



SEE THE FIRST PS ARTICLE ON MEDICAL EQUIPMENT —PAGE 2

PS THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 110 1961 Series

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PS wants your ideas and contributions, and is glad to answer your questions. Names and addresses are kept in confidence. Just write to:

Sgt Half-Mast,
PS Magazine,
Raritan Arsenal,
Metuchen, New Jersey.

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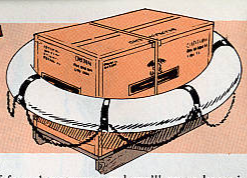
KING-SIZE



EMTU Phase I ring any bells?

Maybe not, but it could set off four-alarm gongs, and you'll get to know it as well as your name, rank and serial number.

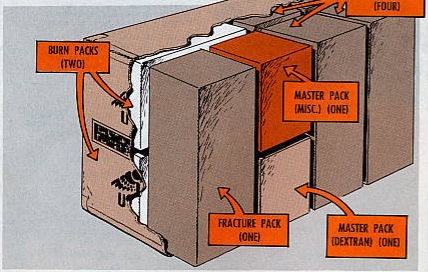
It stands for—

EMERGENCY MEDICAL TREATMENT UNIT PHASE I.

And it's a special super First Aid kit of medical supplies to be used for self-aid and buddy-aid—following a nuclear attack or other mass casualty situation such as fires, flood or hurricane. It's for your use before the medics get there.

EMTU Phase I contains a 72-hour supply of drugs and equipment for treatment of casualties among 100 guys. It comes in a 320-lb. cardboard box that's being issued on a basis of one per 100 troops.

Here's what the unit looks like.



The Emergency in EMTU Phase I means just that. It's strictly for the immediate use of troops who have come under nuclear attack or for casualties resulting from a major disaster.

LIFE SAVER

So follow the rule of KYCPHOI—**KEEP YOUR COTTON PICKING HANDS OFF IT**—and make sure it's enforced.

Keeping your hands off the kit is no chicken regulation that'll get you a tour of KP duty if you break it—this one's for keeps.

Foul up the kit and you and your buddy may pay for it with something of real value—like your life.

EMTU Phase I hits your outfit sealed and stays that way except for two setups . . . and two only:

First, and most important, when it's for real and you need what's in it for First Aid in mass casualty situations.

And second, under a regular inspection program, where qualified medics will check to make sure things are shipshape and then reseal the carton.

EMTU Phase I is to be stored in your unit area where you can get at it real easy.

It's real life insurance, so treat it with tender loving care.

In other words treat it like you would anything that can save your life. 'Nuff said?

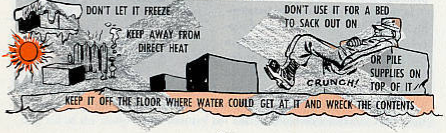
Just in case you've got some guys who thinks the box contains a hush-hush secret weapon, here's what's in the Phase I Kit:

It contains four wound, two master, one fracture and two burn packs—all king-sized—ready to go to work if and when your outfit needs it.

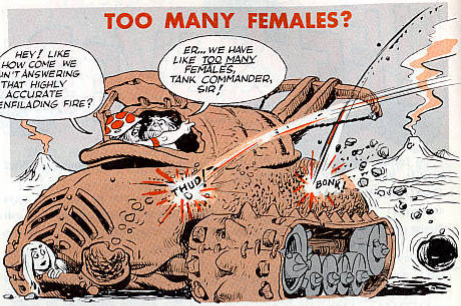
EMTU Phase I is just the first step in the Army's Emergency Medical Care Program but it's the critical step and the one figured to take over when you can expect little or no direct medical help.

It's your stopgap protection.

What you learn and remember from your First Aid courses given under Training Circular 8-1—together with how you take care of your Emergency Medical Treatment Unit—may someday go a long, long way in keeping you alive.



TOO MANY FEMALES?



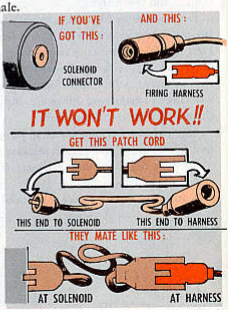
A pair of females, at times, can spell real trouble. Right?

'Specially when they're electrical terminals, supposed to get together to do a job—but, as usual, are lost without a male.

Like f'rinstance on some early models of the M73 machine gun mounted on the M60 tank . . . when you go to hook up the MG's switch firing harness to the solenoid, FSN 1005-770-3437, and find yourself staring at two female terminals.

Spare your ulcer, man, 'cause cussing's not going to get 'em together. What you need is a patchcord with a pair of male terminals to solve the problem.

In this case it's solenoid cable assembly, FSN 1005-778-6219. It was supposed to come with your machine gun package, but just in case it's lost, stolen or strayed, buzz supply for one and you'll be in business. Like quick, that is.



The handy patchcord's not needed on the latest solenoid, FSN 1005-603-4836, since the connector's designed to take the harness without it.

FLIPPIN' YOUR LID, OVER THE FEED COVER . . .

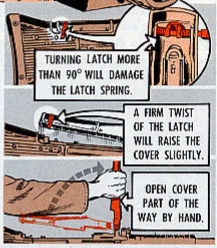
GUNNER—LOOK OUT

The feed cover on your M60 machine gun isn't supposed to swing open all the way when you turn the latch. So please take it easy—don't go forcing the latch, thinking the cover's stuck or stubborn.

If you turn the latch more than 90 degrees you're likely to damage the latch spring, and then the cover won't stay shut when you start firing.

On the M60 all it takes to open the feed cover is a firm turn (back) on the latch. The latch will let go completely and the cover will raise up a good crack. Then it's up to you to lift the cover the rest of the way to its fully opened position.

It's that simple. So pass the word: Never force the latch, go easy on the latch spring, and the feed cover will stay closed during firing.



And, guess you know, when the cover is in need of repair or replacement parts, your M60 goes to Ordnance for the chores.

CUTTING CORNERS

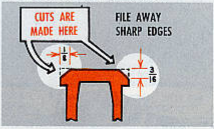
So you've been having trouble with the buffer retaining yoke on your M60 machine gun.

Like f'rinstance . . . the yoke has a habit of popping out of the receiver when you open the machine gun cover.

The problem's being solved with the weapons that're coming off the production line by first making a small change in the yoke.

The change is right simple—just getting rid of the sharp corners on top of the yoke.

Your support unit can do the same thing for you with the M60's you have by following these dimensions—



BEDLAM IN BOGIELAND

Or the Case of the Crazy Mixed-up Bogies.

Even Perry Mason and his sidekick, Paul Drake, have thrown in the towel far as trying to solve the tangled mess of bogies in storage or float pools.

The problem . . . unmarked bogies.

Seems that many Nike sites, after setting vans up on blocks, have turned in bogies without identifying them as to which trailer or van they came from—making for a fouled up situation.

Put together bogies from seven vehicles used at your site, mix well with six bogies from each of four other sites using the same storage area, stir, making sure 50 percent are not identified, and you'll get a slight idea of the pot of porridge brewing in the storage pool.

To add to the confusion, bogies from several trailers look alike and will fit several different units. But, and paste this in your hat, a bogie will give top-notch suspension only to the vehicle it was designed to carry.

Mis-matching a trailer and a bogie can result in a serious safety hazard or damage from too much lean and tilt.

If, you ever have to roll, you'd have to go through a physical trial and error system to match up your bogie and trailer—shoving a lot of frayed nerves and critical lead time down the drain. Right?

The solution . . . mark them bogies, partner.

And here's a chart that'll make the ID problem a shoo-in—if you use your noggin a little.

TRAILER				UNDERCARRIAGE		FRONT DOLLY			REAR DOLLY			SPRINGS			
Nomenclature	GS-No.	Model No.	Ordnance No.	Federal Stock No.	GS-No.	Ordnance No.	Model No.	Federal Stock No.	GS-No.	Ordnance No.	Model No.	Federal Stock No.	Right Front	Left Front	Right Rear	Left Rear
Trailer, Van; Radar, Tracking Central	GS-15512	M258	8003512	2330-835-8634		GS-16028	8001928			8736177	M429D	2330-626-3337				
	GS-15512	M258	8004733	2330-835-8634		GS-16028	8001928									
	GS-15512	M258	8160688	2330-835-8634		GS-16028	8001928									
Trailer, Van, Radar, Tracking Central	GS-16738	M258A1	8022738	2330-047-3614		GS-16891	8017141			8736187	M429A1D	2330-626-3339				
	GS-16738	M258A1	8162718	2330-047-3614		GS-16891	8017141									
Trailer, Van, Director Station	GS-15504	M259	8003504	2330-835-8635		GS-16027	8001927			8736179	M429D	2330-626-3339				
	GS-15504		8004734	2330-835-8635		GS-16027	8001927									
	GS-15504		8160689	2330-835-8635		GS-16027	8001927									
Trailer, Van, Director Station	GS-16737	M259A1	8022737	2330-046-7817		GS-16890	8017140			8736189	M429A1F	2330-626-3347				
			8162717	2330-046-7817		GS-16890	8017140									
Trailer, Low Bed, Antenna Mount	GS-15518	M260	8003518	2330-835-8636		GS-16029	8001929			8736188	M429G	2330-626-3403				
Trailer, Low Bed, Antenna Mount	GS-17155	M260A1	8162257	2330-046-7820		GS-16892	8017142			8736190	M429A1G	2330-626-3406				
Trailer, Flat Bed, Guided Missile	DS-1263J	M261	8001161	2330-835-8687		GS-16892	8017142			8736182	M430G	2330-626-3404	8001734	8001735	8001850	8001851
Trailer, Flat Bed, Guided Missile	DS-1263JA	M261A1	8164063	2330-046-7563		GS-16892	8017142			8736192	M430A1G	2330-626-3407	8001734	8001735	8001850	8001851
Trailer, Flat Bed, Guided Missile	DS-1263JA	M261A1	8164063	2330-046-7563		GS-16892	8017142									
Trailer, Van, Launching Control	DS-1262B	M262	8003399	2330-835-8688		GS-16030	8001930			8001663	M430H	2330-626-3417	8001870	8001870	8013719	8013719
Trailer, Van, Launching Control	DS-1262BA	M262A1	8002084	2330-046-7819		GS-17153	8017143			8165616	M430AH	2330-626-3419	8001870	8001870	8013719	8013719
Trailer, Van, Electronic Shop	GS-15719	M359	8021796	2330-046-1734	GS-57304	GS-15720	8020420			8759508	M429AH	2330-626-3418	8001870	8001870	8013719	8013719
										8165616	M430AH	2330-626-3419	8001870	8001870	8013719	8013719
	GS-15719		8021904	2330-046-1734		GS-15720	8020420									
	GS-15719		8164690	2330-046-1734		GS-15720	8020420									
Trailer, Van, Electronic Shop	GS-17154	M359A1	8161967	2330-046-3984	GS-56941	GS-16889	8017139			8736183	M429K	2330-626-3363				
Trailer, Van, Electronic Shop	GS-16403	M382	8015003	2330-569-0783	GS-56937	GS-16894	8155304			9136235	M429AK	2330-626-3365	GS-57305	8162426	M430AK	2330-626-3366	8001862	8001863	8001864	8001865
Trailer, Van, Electronic Shop	GS-16404	M383	8015004	2330-569-0781		GS-16893	8155303			8736185	M429N	2330-626-3422		8736186	M430N	2330-626-3424	7609864	7616097	7609865	8013749
										8158432	M429AIN	2330-626-3361	GS-56942	8158433	M430AIN	2330-626-3362	7609864	7616097	7609865	8013749
										8158428	M429AIE1	2330-626-3426	GS-56938	8158429	M430AIE1	2330-626-3429	8001735	7609863	8001856	7603479
										8158430	M429AIE2	2330-626-3430		8158431	M430AIE2	2330-626-3431	8001733	7609863	8155308	8155307

MORE

'Bout the only thing you can't get from the chart is the exact location on the Mesabi range that the iron ore came from in the first place. Aside from that bit of poop you've got enough Federal Stock Numbers, GS numbers, Ordnance numbers and Model numbers to check your bogie back to its birth. Blank spaces on the chart mean no numbers have been assigned to the item as yet.

So set your own local SOP that'll be foolproof. Use tags, stencils or paint—just make sure the final result will get the right bogie back under the right trailer.

One more thing . . . don't wait for moving day. Get on the stick, and do it now.

TRAILER					UNDER-CARRIAGE		FRONT
Nomenclature	GS-No.	Model No.	Ordnance No.	Federal Stock No.	GS-No.	Ordnance No.	GS-No.
Trailer, Van, Director Station	GS-18454	M259C	8530312				
Trailer, Van, Launching Control: 4 Wheel	1877-1	M262A1C	8523856	2330-629-9863	GS-17153	8017143	GS-57304
Trailer, Antenna: 4 Wheel	GS-18062	M406	8523465	2330-607-3656			GS-56943
Trailer, Antenna: 4 Wheel		M406A1	8736390				GS-56943
Trailer, Guided Missile Director Station: 4 Wheel	GS-18061	M424	8524273	2330-629-9864			GS-56935
Trailer, Guided Missile Tracking Station: 4 Wheel	GS-18063	M428	8523503	2330-629-9865			GS-56933
Trailer, Van, Maintenance and Spares	GS-18100		8524892				GS-56941
Trailer, Van, Radar Signal Simulator		XM446	10021562	2330-777-8497			
Trailer, Van, Radar Signal Simulator		XM416E1	8736386	2330-806-4587			
Trailer, Guided Missile Launching Control Station: 4 Wheel		M262A2	8736389	2330-716-8088			GS-57304
Trailer, Guided Missile Director Station: 4 Wheel		M424A1	8736391	1430-739-4373			GS-56935
Trailer, Guided Missile Tracking Station: 4 Wheel		M428A1	8736392	1430-716-8091			GS-56933
Trailer, Low Bed, Guided Missile, 7 Ton: 4 Wheel	1878-43	XM529	9021852	2330-780-0801			GS-65799
Trailer, Van, Director Station	GS-18455	M259A1C	8530313				
Trailer, Van, Electronic Shop		M382E1	9019497	2330-832-1974			GS-56937
Trailer, Antenna: 4 Wheel	GS-56311	M406E1	9106570	2330-786-5243			
Trailer, Guided Missile Director Station	GS-58529	M424E1	9020385				GS-56935
Trailer, Guided Missile Tracking Station	GS-58292	M428E1	9020386				GS-56933
Trailer, Van, Electronic Shop	GS-60000	M564	9152886				

DOLLY			REAR DOLLY			SPRINGS			
Ordnance No.	Model No.	Federal Stock No.	GS-No.	Ordnance No.	Model No.	Federal Stock No.	Right Front	Left Front	Right Rear	Left Rear
8736179	M429F	2330-626-3359		8736180	M430F	2330-626-3360	8001730	8001731	8001854	8001855
9136235	M429A1K	2330-626-3365	GS-57305	9136236	M430A1K	2330-626-3366	8001862	8001863	8001864	8001865
8158434	M429A1P		GS-56944	8158435	M430A1P	2330-795-1798	8221309	7609863	8001857	8001857
8158434	M429A1P		GS-56944	8158435	M430A1P	2330-795-1798	8221309	7609863	8001857	8001857
8158426	M429A1Q		GS-56936	8158427	M430A1Q		7615319	8001862	8013749	8001854
8158424	M429A1R		GS-56934	8158425	M430A1R		7615319	8221331	8155307	8001855
8158452	M429A1N	2330-626-3361	GS-56942	8158433	M430A1N	2330-626-3362	7609864	7616097	7609865	8013749
8736325	M429A1E3	2330-777-8497		8736326	M430A1E3	2330-777-8499	7616097	7616097	8686812	8686812
8736325	M429A1E3	2330-777-8497		8736326	M430A1E3	2330-777-8499	7616097	7616097	8686812	8686812
9136235	M429A1K	2330-626-3365	GS-57305	9136236	M430A1K	2330-626-3366	8001862	8001863	8001864	8001865
8158426	M429A1Q		GS-56936	8158427	M430A1Q		7615319	8001862	8013749	8001854
8158424	M429A1R		GS-56934	8158425	M430A1R		7615319	8221331	8155307	8001855
9152233			GS-56911	9152232			9153550	9153550	9153549	9153549
8736189	M429A1F	2330-626-3347		8736190	M430A1F	2330-626-3350	8001730	8001731	8001854	8001855
8158428	M429A1E1	2330-626-3426	GS-56938	8158429	M430A1E1	2330-626-3429	8001736	7609863	8001856	7603479
8160576	M429A1E4	2330-792-5387	GS-56944	8158435	M430A1P	2330-795-1798	8221309	7609863	8001857	8001857
8158426	M429A1Q		GS-56936	8158427	M430A1Q		7615319	8001862	8013749	8001854
8158424	M429A1R		GS-56934	8158425	M430A1R		7615319	8221331	8155307	8001855
9980140	M565			9980141	M566		7615319	8221331	8155307	8001855

HERCULES
IMPROVED HERC

END

YOUR ALPHABET KITS

A tool in the hand is worth two in the supply room—if you have the right tool. The right tool by the wrong name will do its job just as well—but try and get it when you ask for it by the wrong name.

The only sure way to beat the confusion is to know what the tool looks like, what it's called and the right FSN. And that goes for your Army Aircraft Organizational Maintenance Tool Kits.

Your TOE or TA is your authorization for having one or more of these kits:

Kit A	FSN 5180-323-4947
Kit A Supplemental	FSN 5180-323-4948
Kit B	FSN 5180-323-4979
Kit C	FSN 5180-323-5037

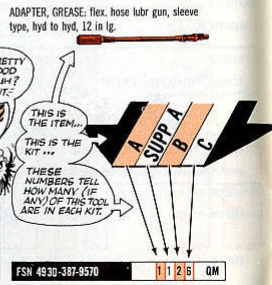
These kits are now the logistic responsibility of the Transportation Corps.

There are a few things to keep in mind when you're checking your kit. Some of the tools you're issued may not look exactly like the ones listed here. That's because some tools are made by different manufacturers, but they should look close enough to the tool shown here to give you an idea of what to look for.

When TC issues their SM on this tool set, they say its number will be SM 55-4-5180-A08. This set is currently listed in SM 9-4-5180-A05.

Now that you have the facts, here's what you look for:

ADAPTER, GREASE: flex. hose lubr gun, sleeve type, hyd to hyd, 12 in lg.



ADAPTER, GREASE GUN COUPLING: hyd inlet fitting, push-nozzle, stght rigid extn, 5½-in lg overall.

FSN				
4930-204-2550	1	1	3	QM

ADAPTER, SOCKET WRENCH: ½-in sq male end, ¾-in sq female end.

FSN				
5120-227-8088		1	3	QM

ADAPTER, SOCKET WRENCH: ¾-in sq male end, ½-in sq female end.

FSN				
5120-144-5207		1	1	QM

APPLICATOR, DECAL: plastic, hand type.

FSN				
5120-628-5569	1	1	3	QM

BAR, WRECKING: ¾-in dia stk, 30-in lg overall.

FSN				
5120-293-0665	1	1	3	QM

BATTERY FILLER, GRAVITY: water jug w/pitcher type hdl, 4 qt plus 2 pt or minus 1 pt, w/o overflow control, flow or fluid level indicator, 18-in lg x ¼-in dia hose, 8-in lg x 8-in w x 12-in h overall.

FSN				
6140-635-3824	1	1	3	SIG

BATTERY FILLER, SYRINGE: 6 oz ru bulb, rigid bent nozzle, 10¾-in lg o/a.

FSN				
6140-643-4490	1	2	4	SIG

BATTERY, STORAGE: 24v (or any suitable substitute labeled FOR GROUND USE ONLY).

FSN				
6140-248-6148		1	2	4	SIG

BLADE, HAND HACKSAW: HSS, all hard, 24 teeth per in, 0.025-in thk, 10-in blade.

FSN				
5110-237-8107	12	24	36	QM

BLOWTORCH, GASOLINE: pump generating pressure type, 1 qt cap rd tank.

FSN				
5120-222-1371	1	1	3	QM

BRUSH, FILE CLEANER: wire ¼-in clear of block, 0.010 dia, 4½-in x 1⅜-in brushing surface, incl brush & scorer.

FSN				
7920-224-7987	1	1	3	QM

BRUSH, PAINT: fl, hog bristle, sq edge, 3-in w x ⅞-in thk, 3¼-in exposed lg.

FSN				
8020-242-7266	1	2	3	ENG

BRUSH, VARNISH: fl, hog bristle, chisel edge, ½-in thk x 1½-in w, 2 1/16-in exposed lg.

FSN				
8020-260-1305	2	4	6	ENG

BRUSH, WIRE, SCRATCH: S wire, curved hdl, rocker rect face, 1⅛-in to 1¼-in lg clear of block, four rows w, 18 rows lg, 6-in to 6¼-in lg brush part, 14-in lg o/a.

FSN				
7920-291-5815	2	4	6	QM

CABINET, SPARE PARTS: S body w/wood top, 11 drawers, assembled, 35½-in h x 25-in w x 27-in deep overall.

FSN				
7125-330-0130	1	1	3	QM

MORE

A B C D E

CABLE ASSEMBLY, POWER, ELECTRICAL: three cond 600 v, ru-ins cot-brd ru jacket, stranded no. 12 AWG ; male & female plugs, 50 ft lg overall incl terminations, type S.

FSN 6150-682-3460	1	2	3	ORD

CHARGER, BATTERY: rectifier, RA-91-C, full wave, selenium pl, ptbl, 115/230 v, 50/60 c, sgle-ph, supplies adj dc voltage at 2 to 12 amp.

FSN 6130-222-6204	1	2	2	ENG

CHISEL, COLD, HAND: ¼-in w cut, 4-in lg o/a.

FSN 5110-234-1927	1	2	3	QM

CHISEL, COLD, HAND: ½-in w cut, 5¾-in lg overall.

FSN 5110-186-7107	1	1	1	QM

CHUCK, AIR, INFLATING: sgle ft type, ¼ NPT female.

FSN 4730-270-3901	1	1	3	ORD

CLAMP, C: light service rating, cast frame, 3-in size, 1⅞-in deep throat.

FSN 5120-293-0146	2	4	6	QM

CLAMP, C: med service rating, 6-in size, 2¼-in deep throat.

FSN 5120-242-1121	2	2	6	QM

A B C D E

CLEANER, VACUUM: hand type, w/exposed separator, ⅔ h.p. 500 w input ac/dc, 115 v, 60 c, sgle-ph, w/blower outlet, w/e.

FSN 7910-205-3400	1	1	1	QM

COMPRESSOR, RECIPROCATING, POWER DRIVEN: ptbl, 8 cfm at 175 psi discharge pressure.

FSN 4310-805-9362	1	1	3	TC

COUPLING, GREASE GUN: S, 360 deg swv, eight lkg positions, hyd nozzle, ⅛-27NPT female.

FSN 4930-585-0209	1	1	3	QM

COUPLING HALF, QUICK DISCONNECT: stght S body, ¼-18NPT fluid female, male quick disconnect end.

FSN 4730-142-1960	2	2	6	ENG

COUPLING HALF, QUICK DISCONNECT: stght S body, ¼-18 NPT fluid male, male quick disconnect end, 1¾-in lg overall.

FSN 4730-142-1958	2	2	6	ENG

COUPLING HALF, SELF-SEALING: stght, S, ¼-18 NPT, swv type.

FSN 4730-595-1813	1	1	3	ORD

CRIMPING TOOL, TERMINAL, HAND: wire accommodated, manual compression type, no. 22 thru no. 10 AWG.

FSN 5120-293-2319	1	1	1	3	QM

CROWFOOT ATTACHMENT, SOCKET WRENCH: non-ratcheting type, 12 pt open wall bx, ¼-in drive size, 7/16-in opng.

FSN 5120-222-7971	1		1	3	QM

CROWFOOT ATTACHMENT, SOCKET WRENCH: non-ratcheting type, 12 pt open wall bx, ¼-in drive size, ½-in opng.

FSN 5120-238-8266	2		1	3	QM

CROWFOOT ATTACHMENT, SOCKET WRENCH: non-ratcheting type, 12 pt open wall bx, ¼-in drive size, 9/16-in opng.

FSN 5120-541-4074	1		1	3	QM

CROWFOOT WRENCH: generator & starter nut, sgle open end w/hole for pin hdl, 9/16-in opng, 13⅞-in lg.

FSN 5120-317-8076		1	1	3	QM

CUP, PAINT, SPRAY GUN: 1 qt cap., clamp type, w/al cover attachment.

FSN 4940-190-5164		2	2	6	ORD

CUTTER, TUBE: enclosed feed mech type, ⅛-in to 1-in dia tu cutting range, w/deburring tool.
Formally FSN 5110-204-1888

FSN 5110-288-6520		1	1	3	QM

DETECTOR KIT, CARBON MONOXIDE: colorimetric aspirator bulb atchd directly to indicator tu, w/air inlet valve, mtl case 5-in lg x 5-in w x 8-in h w/e.

FSN 6665-283-0654		1	1	1	Cml

DISPENSING PUMP, HAND DRIVEN: piston type, continuous flow, thd plug mtg, 2-in bung opng, discharge fitting positive shut-off nozzle, 20 ft lg overall, 1¼-in hose, 38-in lg nonadj intake pipe, 15 gal per 100 rev.

FSN 4930-276-0087		1	1	3	QM

DRESSER, ABRASIVE WHEEL, HAND: 1¼-in dia revolving cutter wheel type, five ex sets of cutter wheels.

FSN 5120-293-1494			1	1	QM

DRILL, ELECTRIC, PORTABLE: ¼-in size hv-duty, ac/dc, 115 v.

FSN 5130-293-1127			1	3	QM

DRILL, HAND: 0 to ¼-in cap.

FSN 5110-243-0884		1		3	QM

DRILL SET, TWIST: HSS, stght rd shk, number series 1 to 60 size range, 60 drills w/case.

FSN 5133-449-6775		1	1	3	QM

DYE PENETRANT KIT: inspection dye penetrant, ptbl.

FSN 6635-566-5192			1	3	ORD

MORE

ENERGIZER, ENGINE STARTER: w/dolly, 28 v, dc, w/two 20-ft cables, w/btry carrier.

FSN				
FSN .1730-776-7079	1	1	1	TC

EXTENSION, SOCKET WRENCH: ½-in sq-end, 5-in lg.

FSN				
FSN 5120-243-7326	1	1	3	QM

EXTENSION, SOCKET WRENCH: ½-in sq-end, 10-in lg.

FSN				
FSN 5120-227-8074	1	1	3	QM

EXTRACTOR SET, SCREW: sgtht fluted type extractors ¼-in, 5/16-in, 3/8-in, 7/16-in, & ½-in screw size rating w sliding turn-out nuts, w drill guides & drills, w case.

FSN				
FSN 5120-540-1416	1	1	1	QM

Extractor Screw Size

FSN	Inches
5120-223-6940	¼
5120-223-6941	5/16
5120-223-6942	3/8
5120-223-6943	7/16
5120-223-6944	½

Drill Guide Data

FSN	Drill Size In.	Nom. Outside Dia. In.
5120-223-8868	⅛	3/32
5120-223-8965	⅛	3/16
5120-223-8966	⅛	11/32
5120-223-8967	⅛	3/8
5120-223-8968	3/16	11/32
5120-223-8960	3/16	7/16
5120-223-8961	3/16	15/32
5120-223-8962	3/16	½
5120-223-8963	¼	11/32
5120-223-8964	¼	5/16

Length In.

5133-227-9650	⅛ 2¾	5133-227-9662	3/16 4½
5133-227-9654	3/16 3½	5133-227-9664	11/32 4¾
5133-227-9658	¼ 4		

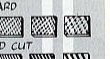
FACESHIELD, INDUSTRIAL: replaceable clear plastic mask w/forehead guard edges unbound, tiltable, hd gear supported, 0.020-in porm 0.002-in thk mask, 8½-in porm ⅛-in lg window.

FSN				
FSN 4240-439-3450	1	1	3	CML

FAUCET, GATE: lock type, 2NPT.

FSN				
FSN 4510-640-0944	1	1	2	3	ENG

FAUCET, SINGLE: vert mtg, rough br body gnd key seat, ¾ NPT male, leve patt br hdl w/leaking device.



FSN					
FSN 4510-277-7174	1	1	2	3	ENG

FILE, HAND: American patt, fl type, dble cut bastard faces, dble cut bastard edges, 8-in heel to pt.

FSN				
FSN 5110-249-2848	1	2	3	QM

FILE, HAND: American patt, fl type, dble cut sm faces, sgle cut sm edges, 10-in heel to pt.

FSN				
FSN 5110-249-2850	1	1	3	QM

FILE, HAND: American patt, rd type, dbl-cut bastard face, 3/16-in dia of largest sec, 8-in heel to pt.

FSN				
FSN 5110-234-6551	1	1	3	QM

FILLER AND BLEEDER, HYDRAULIC SYSTEM: caster mtd, 3 gal liquid cap., w/o air & fluid separator, one pressure 0 to 60 psi scale range 120-in lg hose w/ manual control & safety valve releases excess air pressure.

FSN 4910-580-9750		1	1	3	ORD

FLARING TOOL, TUBE, HAND: comb. self-contained style, for 1/4-in, 3/16-in, 1/2-in, 3/8-in, 1/2-in, 5/8-in & 3/4-in tu, 74 deg incl angle of flare produced capable of dble flaring 3/16-in, 1/4-in, 5/16-in, 3/8-in, 1/2-in, 5/8-in & 3/4-in tu.

FSN 5120-541-6652		1	1	3	QM

FORCEPS, SHEET HOLDER: stght, 8-in lg overall.

FSN 5120-221-1597		1	1	3	QM

FRAME, HAND HACKSAW: adj, pistol grip hdl, 8-in, 10-in & 12-in blade cap., 3-in to 3 5/8-in depth of throat.

FSN 5110-223-4971		1	1	3	QM

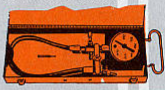
FUNNEL: S, glvd fin, 2-qt cap, 2 7/16-in lg stght rigid spout.

FSN 7240-230-2397		1	2	3	QM

FUNNEL: S, glvd fin, 8-qt cap., 3 1/2-in lg rigid spout w/removable strainer.

FSN 7240-244-1206	1	2	3	QM

GAGE, PRESSURE, DIAL INDICATING: sgle bourdon tu element, sgle reading pressure scale 0 to 1500 psi pressure 5% accuracy rating, 250 lb fig. intervals, 25 lb smallest grad div, 2 1/2-in dial size, black baked enml fin. corr-res-metal case, 1/4 NPT male w/accessories.



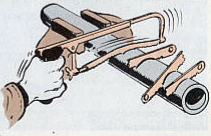
FSN 6685-527-9315		1	1	3	ORD

GENERATOR SET: ptbl, ru tired wheel mtd 7.5/9.3 kw, 28.5 v, dc, two wire.

FSN 6115-511-2210			1	3	ORD

GENERATOR SET, GASOLINE ENGINE: 3 kw rating, 120/208/240 v line to line, 3 ph, 60 c.

FSN 6115-504-1410		1	1	3	ENG



MORE

GREASE GUN, HAND: lever operated, 15-oz cap., 7000 psi pressure, 6⅝-in lg rigid bent angle tu extn, hyd coupler & loader fitting.

FSN 4930-516-5820	2	4	10	QM

If you service rotary wing aircraft you get this item on the basis of one for every two aircraft plus the ones listed in the authorization columns.

GRINDING MACHINE, BENCH, HAND OPERATED: hv-duty utility, med grip, 6-in dia x 1¼-in thk wheel.

FSN 3415-241-3116	1			ORD

GRINDING MACHINE, UTILITY: bench mtg, ⅜-in dia dble-end spdl, 3450 rpm, 7-in dia x 1-in thk wheel, ½ hp, ac, 110 v, 60 c, sgle-ph, plain type workrest.

FSN 3415-517-7754		1	1	ORD

GUN, AIR BLOW: stght design, finger gri hdl button operated, w/hang-up hook, 5 cfm cap. at 50 psi, removable tip, ¼-18 NPSH male.

FSN 4940-241-3075	1	1	3	ORD

HAMMER, HAND: screw-in inserted plastic face, med hard, 2½-in dia, 2 lb total wt.

FSN 5120-357-6077	1	1	3	QM

HANDLE, FILE, WOOD: med size, 1¼-in dia hand grip, 4½-in lg overall.

FSN 5110-263-0349	3	3	6	QM

HANDLE, SOCKET WRENCH: hinged type, ½-in drive end, 12⅛-in lg overall.

FSN 5120-221-7958	1	2	3	QM

HANDLE, SOCKET WRENCH: rvrs rtc type, ½-in drive end, 9½-in lg overall.

FSN 5120-230-6385	1	2	3	QM

HANDLE, SOLDERING IRON, WOOD: 1½-in dia, 6½-in lg overall.

FSN 3439-263-0346	1	1	3	ORD

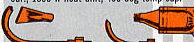
HEATER, DUCT TYPE, PORTABLE: gasoline, 30,000 btu output per hr, hand crank blower unmounted, flex. duct 2½-in dia x 6 ft lg, w/hdl.

FSN 4520-272-8855	1	1	3	ENG

HEATER, DUCT TYPE, PORTABLE: gasoline blower, 400,000 btu per hr minus 65 deg F heat cyl & stroke c, w/auto. temp control, wheel mtd, one adpt 6 to 12-in, three flex ducts, 6-in dia x 15-ft lg, two flex ducts 12-in dia x 15-ft lg.

FSN 4520-203-0224	1	1	3	ENG

HEAT GUN, ELECTRIC, PORTABLE: 110 v, univ cur., 1000 w heat unit, 450 deg temp cap.



FSN 4940-357-1369	1	1	3	ORD

HOLDER, SHEET METAL, HOLE: forceps operated, $\frac{3}{32}$-in rivet size, 0 to $\frac{3}{16}$-in thk material.

FSN 5120-242-3789		10	10	30	QM

HOLDER, SHEET METAL, HOLE: forceps operated, $\frac{1}{8}$-in rivet size, 2-in lg.

FSN 5120-222-3335		10	10	30	QM

HOLDER, SHEET METAL, HOLE: forceps operated, $\frac{3}{32}$-in rivet size, 0 to $\frac{3}{16}$-in thk material.

FSN 5120-242-3790		10	10	30	QM

HOSE ASSEMBLY, RUBBER: air, braided, $\frac{1}{4}$-in id, w/ nonferrous female swv fittings, $\frac{1}{4}$ NPSH, 50 ft lg.

FSN 5130-614-1450		1		1	3	ORD

HYDROMETER, SYRINGE BATTERY: 1. 175 to 1.325 SP GR Range w/thermometer −65° to 125° temp w/integral correction chart.

FSN 6630-240-3905		1		1	3	CML

IGNITION ANALYZER KIT: w/assy.

FSN 6625-603-1369				1	3	ORD

INDICATOR ASSEMBLY: cold cyl.

FSN 6625-569-5202				1	1	ORD

INDICATOR, PISTON POSITION: 18-mm complete w/14-mm body assy, w/case, seven supplemental pivot arms, ten calibrated scales, w/ btry, magneto leads, & instruction book, less supplemental btry.

FSN 491D-300-1344		1	1	3	ORD

INDICATOR TUBE, CARBON MONOXIDE: glass tu, NBS carb-monoxide color-metr indication gel, 12.5 cm lg, 7-mm dia, w/color chart.

FSN 6665-276-7545		2	2	2	CML

JACK, HYDRAULIC, HAND: self-contained, 5 ton cap., $5\frac{1}{2}$-in closed h, 15-in extended h, sgle pump w/ screw extn.

FSN 5120-540-2343		2		2	3	QM

JACK, HYDRAULIC, HAND: self-contained, 10-ton cap., 8-in closed h, 21-in extended h, single pump w/ screw extn.

FSN 5120-203-4697				2	2	QM

JACK, HYDRAULIC, TRIPOD: 5-ton cap., $23\frac{3}{16}$-in h, 16-in hyd lift, w/15-in screw extn & two sets of leg extns, removable pump (outfits w/L-23 A/C get 3).

FSN 1730-596-4542				3	2	QM

JACK, HYDRAULIC, TRIPOD: 10 ton cap.

(Issued only to outfits servicing H-21 and H-25 A/C)

FSN 491D-540-0562				2	ORD

MORE

KEY SET, SOCKET HEAD SCREW: L-type hdl, hex type, 0.050-in to 5/16-in w across flats, 1 13/32-in to 5 3/4-in lg arm, 13 wrenches in ro.

FSN 5120-204-0972 | 1 | 2 | 3 | QM

FSN	SIZE
5120-198-5401	1/2
5120-198-5398	3/16
5120-224-2504	5/64
5120-242-7410	3/32
5120-240-5292	1/8
5120-198-5392	5/32
5120-240-5300	3/16
5120-242-7411	7/32
5120-224-4659	1/4
5120-240-5274	5/16
5120-198-5390	3/8
5120-198-5391	1/2
5120-240-5268	9/16

QM

KIT, SPARK PLUG CLEANING: c/o 12 items.

FSN 4910-786-9271 | 1 | 1 | 1 | ORD

LADDER, FOLDING, REFUELING: wood, 127-in lg, 12 rungs 14-in lg, w/safety shoes, cushion straps & adj turnbuckle.

FSN 1730-253-9982 | 1 | 3 | TC

LEVEL, BENCH: Cl, sgle face, adj to true vials only, 8-in. lg overall, on level vial, nongraduated & ungr.

FSN 5210-241-3623 | 1 | 1 | 3 | QM

LEVEL, POCKET: al or br, sgle face, nonadj, 2 1/2-in lg overall, one level vial nongraduated & ungr.

FSN 5210-223-9604 | 1 | 1 | 3 | QM

LEVEL ROD: spirit cir type, three holes equally spaced.

FSN 6675-507-0845 | 1 | 1 | 3 | ENG

LIGHT, EXTENSION: 100 w lamp med base, three cond, cable 100 ft lg excl term, w/guard, hook, phenolic hdl, & explosion-proof globe.

FSN 6230-268-9246 | 1 | 2 | 3 | ENG

LIGHT, IGNITION TIMING: three lead type 4 1/2 v btry reqd, neon bulb element, rect sh-met. case, 8 1/2-in lg x 3 1/2-in w x 4-in h excl wire leads 48-in lg pos lead x 48-in lg neg lead x 48-in lg h tension lead, spg clip term.

FSN 6625-255-1449 | 1 | 1 | 3 | SIG

LUBRICATING UNIT: power operated, elec motor w/30 ft hose, w/swv fitting.

FSN 4930-691-1186 | 1 | 1 | 3 | QM

LUBRICATOR: brg assy.

FSN 4930-131-9667		1	1	3	QM

MAGNIFIER: monocular, self illuminated, two cir lens, 2-in dia, 5 power, plastic frame, plastic or mtl removable hdl.

FSN 6650-256-9058	1	1	3	ORD

MAINTENANCE PLATFORM: adj type, hyd adjustment, 3 ft to 10 ft h working level, one S pl working platform w/four wheels, w/o locks, equipped w/ladder & safety guards around platform, foxed type, 131-in lg x 44-in w x 123-in h.

FSN 1730-390-5618			3	TC

MAINTENANCE PLATFORM: manual adj type, 2 ft 3-in & 4 ft h working level, two magnesium working platforms, w/two casters w/o locks, 30-in w x 54-in h x 104-in lg overall.

FSN 1730-624-0684	1	2	3	TC

MEASURE LIQUID: 2 qt cap., w/flex. S spout & flow control valve, to be water, acid, alcohol, oil, & gasoline resistant.

FSN 7240-255-8113	1	2	3	QM

MOORING KIT, AIRPLANE:

FSN 1730-097-5395			2	2	TC

MULTIMETER: range 0 to 5000 v ac/dc in five steps ea, 0 to 500 ma dc in three steps, 0 to 400,000 ohms in two steps 3% accuracy on dc range; 5% accuracy on ac range, 1000 ohms per ac/dc range sensitivity, 3 1/16-in w x 2 9/16-in thk x 5 7/8-in h overall, operates on 1.5 v btry.

FSN 6625-543-1438	1	1	3	ORD

NIPPLE, PIPE: br, cd-pltd, hex, 30 deg angle seat, 1/4-18NPSH-2, rh, 3/16-in distance across flats 1 13/16-in lg.

FSN 4730-287-1589	2	2	6	ENG

OILER, HAND: 5 1/2 oz cap., force fed by int pump, mtl body, 1 7/16-in bottom dia, 6-in flex. spout.

FSN 4930-262-8870	2	4	6	QM

OIL GUN, PNEUMATIC: curved rigid neck 32 oz cap.

FSN 4930-222-2975	1	1	3	QM

MORE

PADLOCK: pin tumbler type, chain equipped, 9-in lg, 3200 key changes, solid br case, 1½-in w x 2½-in h, w/S shackle & clevis.

FSN 5340-266-6829	2	2	4	6	ENG

PAIL, METAL: steel galvanized finish 3½ gal cap., hv wt.

FSN 7240-160-0455	2	2	4	6	QM

PLIERS, ORD: p/n 8491164.

FSN 5120-321-4507		1	1	3	QM

PLIERS, RETAINING RING: exter fl jaws, 0.087-in to 1-in ring size, 0.038-in dia stght tips, w/adj stop & spg w/bracket.

FSN 5120-288-9717	1	2	3	QM

PLIERS, RETAINING RING: exter fl jaws, 1.430-in to 2-in ring size, 0.070-in dia stght tips, w/adj stop & spg.

FSN 5120-293-0049	1	2	3	QM

PLIERS, RETAINING RING: exter fl jaws, 3.500-in to 3.340-in ring size, 0.115-in dia stght tips, w/adj stop & spg.

FSN 5120-580-7611	1	1	3	QM

PLIERS, RETAINING RING: int fl jaws, 1.020-in to 1.370-in ring size, 0.038 in dia stght tips, w/adj stop & spg, w/bracket.

FSN 5120-293-0048	1	1	3	QM

PLIERS, RETAINING RING: int fl jaws, 1.750-in to 2-in ring size, 0.070-in dia stght tips, w/adj stop & spg.

FSN 5120-293-0045	1	1	3	QM

PLIERS, RETAINING RING: int fl jaws, 3-in to 3.500-in ring size, 0.090-in dia stght tips, w/adj stop & spg.

FSN 5120-293-0046	1	1	3	QM

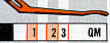
PLIERS, RETAINING RING: int fl jaws, dble rtc, 6.500-in to 4-in ring size, 0.120-in dia tips.

FSN 5120-293-0186	1	1	3	QM

PLIERS, SLIP JOINT: angle nose, multipl tongue & groove, 10-in size.

FSN 5120-278-0352	1	2	3	QM

PLIERS, SLIP JOINT: stght nose, comb. w/cutter, 8-in size.

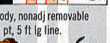


FSN 5120-223-7397	1	1	3	QM

PLUMB BOB: br, hollow body, nonadj removable top, hardened removable pt, 5 ft lg line.

FSN 5210-512-9519	1	1	3	QM

PRE-OILER, PICKLER, MULTI-PURPOSE: 28v dc, complete w/gun assy & accessories.



(Issued only when authorized by WEBTOC or WEBCOHARC)

FSN 4920-769-3376			1	TC

PROTRACTOR: propeller & tri-metrigen installation of aircraft cameras, mtl frame.

FSN 6710-047-2909		1	1	3	SIG

PUMP, INFLATING, MANUAL:

FSN 4320-473-6348	1	1	3	ORD

PUMP, INJECTION, HIGH PRESSURE:

FSN 4320-390-9556	1	1	3	ORD

RATCHET ATTACHMENT, SOCKET WRENCH: rvrs ¼-in sq-end.

FSN 5120-277-1207	1	1	1	QM

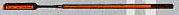
RATCHET ATTACHMENT, SOCKET WRENCH: rvrs ⅜-in sq-end.

FSN 5120-227-8129	1	1	1	QM

RATCHET ATTACHMENT, SOCKET WRENCH: rvrs ½-in sq-end.

FSN 5120-243-7322	1	1	1	QM

RETRIEVING TOOL, MAGNETIC: all angle jt 26-in extended lg, telescopic pltd-S & br knurled hdl, pltd br case (Authorized only to outfits assigned utility or cargo-type Helicopter.)

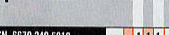


FSN 5120-508-6362	1	1	3	QM

RIVETER, BLIND, HAND: stght hd, for cherry rivets w/pulling heads, brazier and countersunk rivet heads ⅛-in, 3/32-in & 3/16-in.

FSN 5120-357-6065	1	1	3	QM

SCALE, DIAL INDICATING: weighing, hanging style, one hook load receiver stght face dial avdp system, 0 to 4 lb range, 2 oz interval of grad, spg dial mech, w/o counterpoise weights.



FSN 6670-240-5819	1	1	1	QM

SCALE, DIAL INDICATING: weighing, hanging style, one hook load receiver stght face dial avdp system, 0 to 10 lb range, 2 oz interval of grad, spg dial mech, w/o counterpoise weights.

FSN 6670-240-5821	1	1	1	QM

SCALE, DIAL INDICATING: weighing, hanging style, one hook load receiver, stght face dial, avdp system 0-50 lb range, w/one lb interval of grad, spg dial mech, w/o counterpoise.

FSN 6670-254-4634	1	1	1	QM

SEPARATOR, OIL AND WATER, SPRAY GUN: on regulator, br, wall type mtg.

FSN 4940-242-4100	1	1	3	ORD

MORE

SHEARS, METAL CUTTING, HAND: compound lever type, stght cut, 10-in lg overall.

FSN 5110-180-0656 | 1 | 1 3 | QM

SHEARS, METAL CUTTING, HAND: stght patt inlaid blade, 12½-in lg overall.

FSN 5110-293-0089 | 1 | 1 3 | QM

SHEARS, METAL CUTTING, HAND: stght patt, 16-in lg overall.

FSN 5110-221-1083 | 1 | 1 3 | QM

SOCKET, PIPE PLUG: ¾-in sq-drive, ⅝-in sq-opng, 1-in lg overall.

FSN 5120-767-3228 | 1 | 1 3 | QM

SOCKET, PIPE PLUG: ¾-in sq-drive, 3/16-in sq-opng, 1-in lg overall.

FSN 5120-711-8554 | 1 | 1 3 | QM

SOCKET, PIPE PLUG: 3/8-in sq-drive, ⅜-in sq-opng, 1-in lg overall.

FSN 5120-711-8555 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ¾-in sq-drive 8 pt, 25/32-in sq wrench opng.

(Note: this item may be dropped by TC.)

FSN 5120-542-3356 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ½-in sq-drive 12 pt 13/16-in opng, reg lg.

FSN 5120-189-7933 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ½-in sq-drive 12 pt ⅞-in opng, reg lg.

FSN 5120-189-7934 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ½-in sq-drive 12 pt 15/16-in opng, reg lg.

FSN 5120-189-7935 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ½-in sq-drive 12 pt 1-in opng, reg lg.

FSN 5120-189-7927 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ½-in sq-drive 12 pt 1 1/16-in opng, reg lg.

FSN 5120-189-7914 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ½-in sq-drive 12pt 1¼-in opng, reg lg.

FSN 5120-189-7917 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ½-in sq-drive 12 pt 1 3/16-in opng, reg lg.

FSN 5120-189-7913 | 1 | 1 3 | QM

SOCKET, SOCKET WRENCH: ¾-in sq-drive 12 pt 1 3/16-in opng, reg lg.

FSN 5120-189-7928 | 1 | 1 | QM

SOCKET, SOCKET WRENCH: ¾-in sq-drive 12 pt 1¾-in opng, reg lg.

FSN 5120-199-7767 | 1 | 1 1 | QM

SOLDERING IRON, ELECTRIC: ¾ lb, one py pt thd or setscrew fastening 0.250-in to 0.440-in dia tip, 115v, 85 w, ac.

FSN 3439-241-3221 | 1 | 1 1 3 | ORD

SOLDERING IRON, ELECTRIC: 1 lb, py shape tip, setscrew fastening, ⅜-in dia tip, operating power 28 v, 100 w, dc.

FSN 3439-640-3760 | 1 | 1 1 | ORD

SOLDERING IRON, NONELECTRIC: one py pt, cop. ½-in lb wt per pr, w/o hdl.

FSN 3439-222-1559	1	1	3	ORD

SPRAY GUN, PAINT: non bleeder type, hand operated, exter mix, 8 cfm rated air consumption at 50 to 60 lb pressure, al body, ¾-18 NPSH air, w/ 60 deg incl bevel taper seat, ⅜-18 NPSH fluid, w/ 60 deg incl bevel taper seat.

FSN 4940-261-8415		1	1	3	ORD

SQUARE, COMBINATION: 12-in lg grooved type blade, smallest unit of grad for differently grad edge ¼-in, ½-in, 1/16-in & ⅛-in Cl sq & miter hd w/ scriber, one lever w/ center hd & nonreversible protractor hd.

FSN 5210-221-2066		1	1	3	QM

TENSIOMETER, DIAL INDICATING, DIAPHRAGM ACTUATED: 10 to 200-lb rated cap., w/ carrying case.

FSN 6635-566-5210		1	1	3	QM

TESTER, FUEL QUANTITY GAGE: var capacitance.

FSN 6625-302-4802	1	1	1	SIG

TESTER, CYLINDER COMPRESSION: direct type, nine adapters w/14-mm thd, & nine tester units w/18-mm thd, w/carrying case for Army aircraft reciprocating engines.

(Units servicing R-2000 or R-2800 engines authorized 2 each for Set C)

FSN 4920-529-7467	1	1	1	TC

TESTER, MASTER COMPASS, SWINGING: determines magnetic suitability of a compass swinging area to check & lay out general compass swinging bases to determine magnetic heading of an aircraft & to test aircraft compass.

FSN 6605-633-4916		1	3	TC

TOOL KIT, AUTOMOTIVE ELECTRICAL.

FSN 5180-422-8594	1	2	3	QM

WRENCH, OPEN END FIXED. QM

FSN	
5120-277-3414	13/64 & 15/64-in
5120-277-8308	7/32 & 1/4-in
5120-277-8309	5/32 & 1/4-in
5120-277-8310	15/64 & 17/64-in
5120-277-8311	5/32 & 3/16-in
5120-277-8312	3/16 & 9/32-in
5120-277-8313	11/32 & 3/8-in
5120-277-8314	3/8 & 11/32-in
5120-293-1349	7/16 & 1/2-in

PLIERS, SLIP JOINT.

FSN 5120-540-2464	QM

SCREWDRIVER, FLAT TIP.

FSN 5120-236-2140	QM

MORE

TOOL KIT, WINDOW SEAL INSTALLING: in roll.

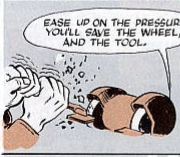
FSN 5180-329-3318	1	1	3	QM

TOWBAR, AIRCRAFT: nose wheel & main landing gear type, hook connection w/1kg pins on towed end, eye pl connection on towing end, nonadj lg, 12-in to 22-in spread at towed end, two solid ru tired wheels 6-in dia, 152-in lg overall.

FSN 1730-294-3031		1	3	TC

TUBE, BLEEDER, HYDRAULIC BRAKE: 10-32NF, 40¾-in lg overall (USAF dwg no. 47A6141).

FSN 4910-490-3773	1	2	6	ORD



UNIVERSAL JOINT, SOCKET WRENCH: ½-in sq-end (Fed Spec GGG-W-641, type XII).

FSN 5120-269-7971	1	2	3	QM

VISE, MACHINIST'S: swv-base, 4-in w stationary jaw, 6-in jaw opng, replaceable jaw faces.

FSN 5120-293-1439	1	1	3	QM

WHEEL, ABRASIVE: stght std wheel, al-oxide, 36 gr, med gr, spacing no. 5, vitrified bond, gr P, 7-in dia, 1-in thk overall, arbor hole mtd, ⅝-in dia.

FSN 3460-187-8681		1	1	ORD

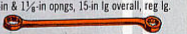
WHEEL, ABRASIVE: stght std wheel, al-oxide 90 gr, med gr, spacing no. 5 vitrified bond gr M, 7-in dia, 1-in thk overall, arbor hole mtd ⅝-in dia.

FSN 3460-187-8680		1	1	ORD

WHEEL, BUFFING: bleached muslin, 64 x 68 thd count, 6-in dia x ½-in four stitching rows, ¾-in spacing w/o face plates.

FSN 3460-516-4636		1	1	ORD

WRENCH, BOX: angular offset dble-hd, 12 pt 1 5/16-in & 1 1/8-in opngs, 15-in lg overall, reg lg.



FSN 5120-228-9521	1	1	3	QM

WRENCH, BOX: angular offset dble-hd, 12 pt, 1¼-in & 1 5/16-in opngs, 17⅜-in lg overall, reg lg.

FSN 5120-184-8676	1	1	3	QM

WRENCH, OPEN END, ADJUSTABLE: sgle-hd, 0 to 0.760-in jaw opng, 6-in lg overall.

FSN 5120-264-3795		1	1	3	QM

WRENCH, OPEN END, ADJUSTABLE: sgle-hd, 0 to 0.947-in jaw opng, 8-in lg overall.

FSN 5120-240-5328	1	1	3	QM

WRENCH, OPEN END, ADJUSTABLE: sgle-hd, 0 to 1.698-in jaw opng, 15-in lg overall.

FSN 5120-423-6726	1	1	3	QM

WRENCH, OPEN END, FIXED: dble-hd, 15 deg angle, 13/64-in & 1 1/4-in opngs, 1/2-in thk hd 12-in lg overall.

FSN 5120-187-7134	1	1	3	QM

WRENCH, OPEN END, FIXED: dble-hd, 15 deg angle, 1-in & 1 3/8-in opngs, 1/2-in thk hd 11 1/2-in lg overall.

FSN 5120-187-7133	1	1	3	QM

WRENCH, PIPE: strap style, 3/4-in to 2-in ips, 12-in lg overall.

FSN 5120-242-3249	1	1	3	QM

WRENCH, PIPE: strap style, 1-in to 5-in ips, 18-in lg overall.

FSN 5120-262-8491	1	1	3	QM

WRENCH, PLIER: stght jaw, 7-in lg.

FSN 5120-277-4243	1	2	4	QM

WRENCH, SPANNER: adj hook, fixed pivot pt 3/4-in to 2-in circle dia 11/32-in thk hook.

FSN 5120-288-6468	1	1	3	QM

WRENCH, SPANNER: adj hook, fixed pivot pt 1 1/4-in to 3-in circle dia, 13/32-in thk hook.

FSN 5120-277-9075	1	1	3	QM

WRENCH, SPANNER: adj hook, fixed pivot pt 2-in to 4 3/4-in circle dia, 13/32-in thk hook.

FSN 5120-277-9076	1	1	3	QM

WRENCH, SPANNER: adj, pin, 3/8-in sq-drive 3/4-in to 2-in cap., w/case.

FSN 5120-373-1756	1	1	3	QM

WRENCH, STARTER ATTACHMENT NUT: sgle-hd offset bx, 12 pt, 0.566-in opng, 12-in lg w/hole for pin hdl.

FSN 5120-317-8095	1	1	3	QM

WRENCH, TORQUE: deflecting frame end drive style, w/visual dial indicating tor mech, 1/4-in sq male drive, 250-in lb cap.

FSN 5120-595-9066	1	2	3	QM

WRENCH, TORQUE: rigid frame end drive style, w/audible or slip clutch indicating micrometer adj tor mech, 3/8-in sq male drive 100 to 750-in lb cap., w/case.

FSN 5120-595-9073	1	2	3	QM

WRENCH, TORQUE: rigid frame end drive style, w/audible or slip clutch indicating adj setting tor mech, 3/4-in sq male drive, 1200 to 4800-in lb cap., w/case.

FSN 5120-221-7945	1	1	3	QM

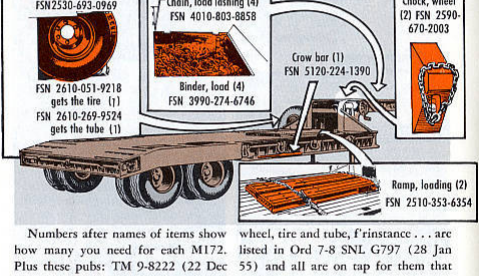
END

Connie Rodd's

"SHORT 'N SWEET DEPT"

M172 OEM blues

You been singin' the blues, about OEM for M172's? So change your tune and your face . . . and jot these items in a handy place.



Numbers after names of items show how many you need for each M172. Plus these pubs: TM 9-8222 (22 Dec 55), LO 9-2330-211-10 (21 Aug 58) and a vehicle record jacket, DA Form 478.

A few of these OEM items . . . the wheel, tire and tube, f'rinstance . . . are listed in Ord 7-8 SNL G797 (28 Jan 55) and all are on tap for them that need 'em.

So try this list. Maybe it'll put a burr under the saddle of your supply wrangler.

Surge that'll burn

Did you ever flip the switch to light up the four lamps on your M100 panoramic telescope so you could do some shooting from your tracked vehicle . . . and find out nothing happens?

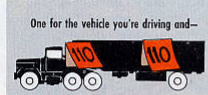
There're different reasons for the lamps not lighting . . . and one good bet is that you didn't do things in the right order. Like f'rinstance, turning on the vehicle's master switch while the switch for the lamps is on. The quick surge that shoots into the lamps can burn them out.

So . . . play it smart. Make sure the switch for the lamps is off before you turn on the master switch.

With proper dispatch

Whenever you're towing a trailer (no matter which one) make sure you pick up two trip tickets (DD Form 110, Vehicle and Equipment Operational Record).

One for the vehicle you're driving and—



One for the vehicle you're towing . . .
Or, else, friend, you might find you've not been properly dispatched.

Could be you'll run into some people who'll tell you they get along fine on one trip ticket when they're towing. Could be they're just plain lucky, too. Think what a bind they'd be in if their trailer's ever involved in an accident, or they have serious trailer break-down — or, tougher, yet — if the spot-check team halts them during a haul.

TM 9-2810 (page 26) says every operator of a wheeled motor vehicle is required to have a properly authenticated DD 110 as official authorization for operating a vehicle, except under Operation TAPER.

If anybody thinks that doesn't include trailers, tell 'em to check AR 700-10, "Registration of Motor Vehicles." It clearly lists trailers as motor vehicles.

Last, but most important—like with any other vehicle, to keep a trailer in good operating condition, you need PM and operating information.

It's sorta tough for you to report a trailer's trip history and its individual PM on the DD 110 assigned to the towing vehicle.

The trailer's a separate piece of equipment, and besides, its maintenance needs are different. So why make problems?

The answer's easy . . . during normal operations a trailer needs, deserves, and must have its own trip ticket.

Make 'em roar

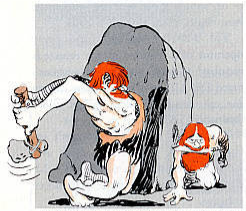
Now you can learn the true facts about slaving . . . easy like. How, and when, and with what you do it is neatly and clearly told by TF 17-3014 (Apr 61), "Slaving Tactical Vehicles."

The 25-minute film tells how to make sure that tactical vehicles are always prepared to slave (or to be slaved), and covers slaving techniques from scratch. It shows, by the numbers, how to start a tracked vehicle with a tracked vehicle, a wheeled vehicle with a wheeled vehicle, and a wheeled one with a tracked one.

The film's recommended for all kinds of units concerned with maintenance and operation of tactical vehicles.

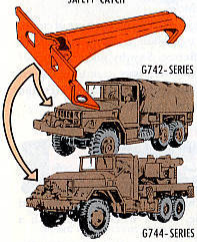
TF 17-3014 is available from your film and equipment exchange.

Shorten the backswing



The more backswing you've got, the harder you can hit . . . if you want to score a knockout.

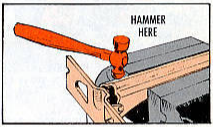
But that's just what you don't want with those safety catches under your hoods on G742 and G744-series trucks.

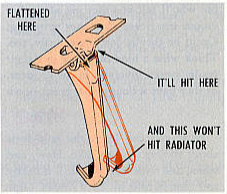


Safety catches on early production models swing back too far . . . unless their tops have been flattened. And when a catch swings too far, it'll hit the top bar of the radiator guard as it comes down . . . then rebound into the core of the radiator, chewing it to a fare-you-well.

So, if your hood safety catch has too much backswing, shorten its swing like para 332d of TM 9-8022 (17 Dec 54) tells you for the G742-series or like it says in TB 9-837-11 (14 Oct 55) for the G744-series.

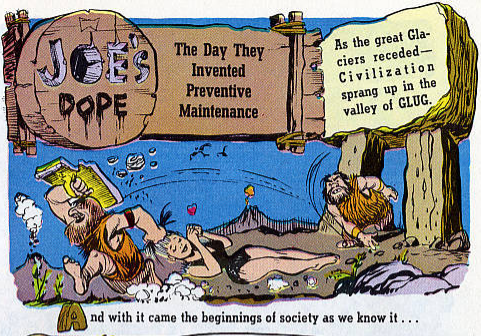
Here's how. Take the catch off the hood and put it in a vise. Tap it with a ball-peen hammer till you flatten the



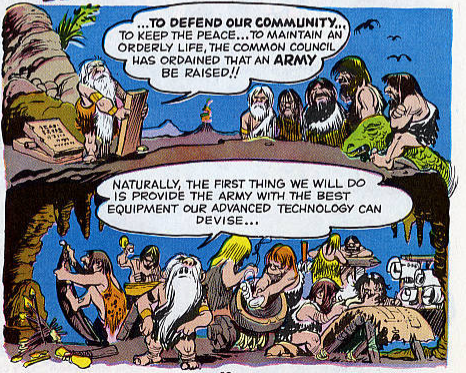


moulded top near the hinge so it'll swing back against the center bend in the bracket. Squeeze the hinge in the vise till it opens with a smooth swing. Then replace the catch on the hood.

This'll stop a lot of chewing.



nd with it came the beginnings of society as we know it . . .



And so, the Valley of GLUG hummed with activity. Almost as if by magic the most advanced concepts were grappled with—and used.

Indeed, each service, working in perfect harmony with the other, produced marvels of engineering and manufacture[1], the principles of which are employed today.

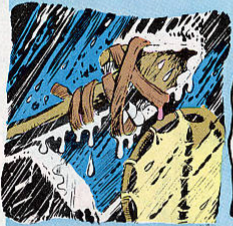
WOW!

[1] J. Arthur Schnitzelbonk, "Early Civilizations and their counterparts", 1961.

It was not long before the ARMY of the Valley of GLUG stood fully equipped, probably to the great relief of the GLUGNIKS whose taxes paid for it all.

The troops thus in garrison, settled down for a few years[2] while the Valley Folk tilled the rich glacial silt[3] and prospered.

Rainy seasons came and went.

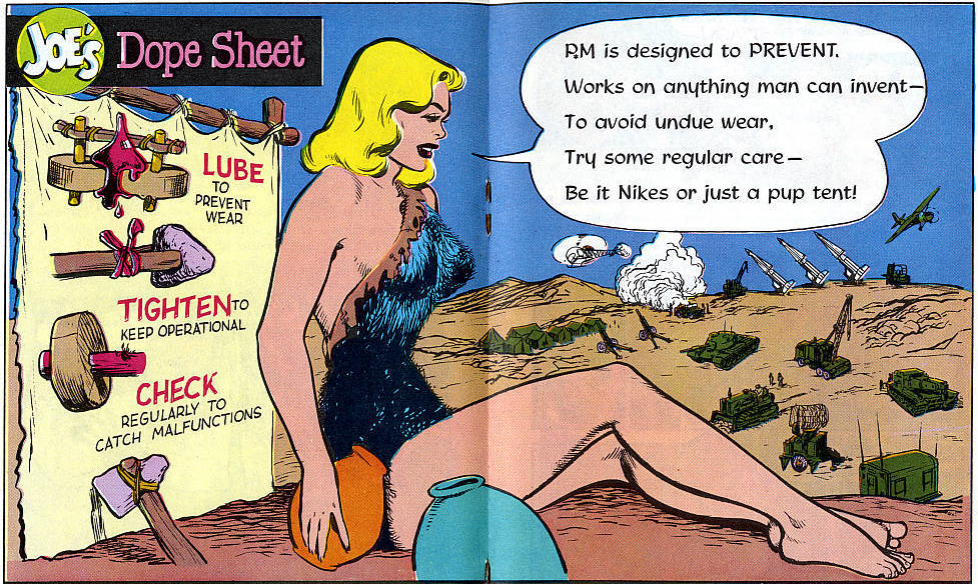


And after each the snows...and winds.

It was not until the hot sun of a dry summer began to wane that the first sign of trouble appeared.

2 Wolfgang Von Smirk in his "Glug Revisited" claims the enemies were in awe of their weapons and hesitated to attack.

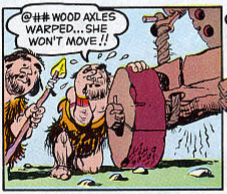
3 Siegfried Aardvark: "Peacetime Activities of Early Armies."



WE HAVE THE WORLD'S BEST EQUIPMENT ... *Take care of it*

IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

BUT the battle simply resulted in a disaster for GLUG. In fact, this defeat[4] by a poorly-equipped army against one so advanced has been studied by military men thruout history...

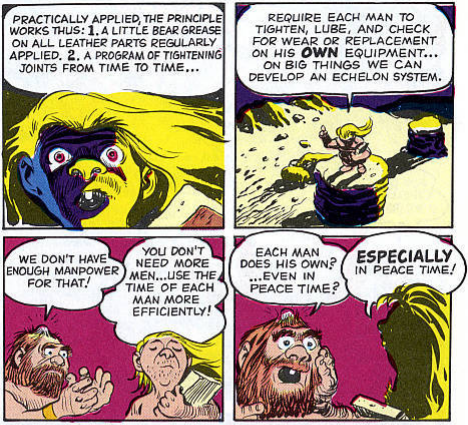


[4] See Gen. Rimfire, Vol. 1 "Goof-offs in History"

GLYG lay in defeat once again.

At this moment (as it happened so often in history) a great leader arose among the Glugniks. This man, able to simplify a complex idea, descended from his cave in the hills and spoke.

[5] Oscar Spelunker: Vol. IV "Cavemen I Have Known." See also "Letters of Hans Leedercanz".



The following Spring, when the Cliffmen attacked again... the Glugniks scored a smashing victory!

ONLY WHEN NECESSARY

Dear Half-Mast,

Is it necessary to tear down 105-mm and 155-mm howitzers annually if there's nothing wrong with them?

I've been told that they should be completely torn down, inspected and reassembled annually, whether they need it or not. I can't see this being done unless Ordnance maintenance personnel thinks it's necessary.

It sure seems like a waste of time and man hours unless the equipment really needs to be repaired. Can you give me some authority to back me up, if I'm right?

SFC E. F. F.

Dear SFC E. F. F.,

You'll never be more right if you live to be 106, Sarge.

Like you said, tearing down a howitzer, or any equipment for that matter, that's in good shape is a waste of time and money and is strictly for the birds.

Army policy now calls for tearing down equipment only when inspections and tests point out you've gotta disassemble it to make needed repairs. And, any equipment that's in good working order doesn't get torn down or disassembled for preventive maintenance reasons unless it's spelled out that way loud and clear in the TM.

The policy is based on the idea of IROAN—Inspect, Repair Only As Necessary—and it applies to all echelons of maintenance.

Para 3b AR 750-5 (14 Sep 61) gives you the official word on IROAN.

Half-Mast

GAS TANKER VARIETIES

Dear Half-Mast,

How many types of G742-series gas tankers does the Army have? And how can we tell which we've got?

It seems the M49's and M49C's with winches got different FSN's from those that don't have 'em. But how can you tell which tankers are supposed to have pintles, air and electrical connections, and gas segregator units?

Sometimes they're different, even when they have the same FSN.

M/Sgt. F. K. R.

Dear Sergeant F. K. R.

Maybe this'll give you the score if you check it against your tanker data plates . . . and TM 9-8022 (17 Dec 54).

First, the winch-equipped M49 is FSN 2320-835-8341. Without a winch, the M49 is FSN 2320-835-8545.

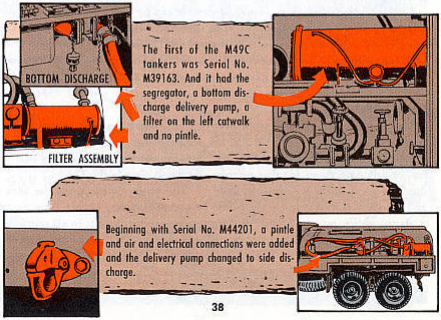
The M49C that's winch-equipped is FSN 2320-141-8237. The M49C without a winch is FSN 2320-141-8235.

CHECK SERIAL NUMBER HERE.

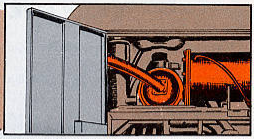
M49's that were used to service aircraft had the gas segregator kit installed by MWO Ord G1-W59 (7 Feb 55), so you may find the M49 with or without the segregator, depending on how it's used.

TB 9-2300-229-10/1 (19 July 1960), tells about maintenance on the gas segregator.

Here's the history of changes in the M49C tanker.



Starting with Serial No. M49265, the filter was removed from the left catwalk, a change made in the water separator element, and anodized aluminum used in the segregator meter and piping.



Maybe this, along with a look at TM 10-1113 (24 Sept 59) on tanker operation, will help to match up your tankers with the right parts.

Older model M49 and M49C gas tanker trucks still need the catwalk filter after you've had MWO 9-2300-217-30 (9 Jun 59) applied. Tankers starting with Serial No. M49265 (Studebaker or Curtiss-Wright) or No. 140700 (Reo) don't need the catwalk filter, 'cause they got factory-built changes in pipes and meters. Note this when you're using TB 9-2300-229-10/1 (19 Jul 60).

Half-Mast

THAT SAFETY MANUAL

Dear Half-Mast,

Here in our artillery group we have a continuing reference to ORD M 7-224, the Ordnance Safety Manual, and yet we do not have this manual. And can't get it. We're in a bind.

We requisitioned it, but the answer came back, "Not authorized a unit of your type."

What can we do? *Lt. P. K. C.*

Dear Lieutenant P. K. C.

Many outfits are having the same problem as yours and I think it's due to a misunderstanding.

That Ordnance Safety Manual is published by the Ordnance Corps for Ordnance technical outfits directly under the command of the Chief of Ordnance (like Ordnance arsenals, Ordnance depots, Ordnance proving grounds, etc.), and is not available for distribution outside the Ordnance Corps.

When a major unit commander in the Field Army directs that the information in the Ordnance Safety Manual be used, he usually does it by a local SOP and provides copies or reproductions.

This same rule applies to safety manuals issued by other tech services.

Department of the Army safety instructions are published in AR's of the 385-series and TM's. TM 9-1903 specifically applies to ammunition and explosives.

Half-Mast

'DEAD' LIVE TRACK

Dear Half-Mast,

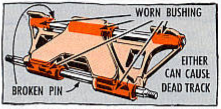
Can you get a "dead" track with the T91E3 type that's on our 105mm M52 howitzers?

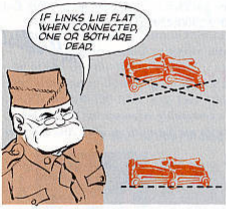
To settle a bet, where can we get the dope on this?

SSgt E. G.

Dear Sergeant E. G.,

That track's known as a "live link" type, but you sure can get a "dead" link or pad if you've got a worn rubber bushing or a broken track pin. It's unlikely that you'd keep going, tho, if the whole track is "dead."





You can read the scoop on this in paras 23f(1)(g) and 23h(1)(c) of TM 9-2630-200-14 (27 Aug 58).

And if you can scrounge a copy of the TM for the M41 tank, TM 9-2350-201-12 (29 Jul 58), you can check on how this live link track's built. Para 326c(6) tells you that links in this type o' track are connected at a 15-degree angle. If two links lie flat when connected, one's "dead"—maybe both.

Half-Mast

TO EACH HIS OWN

Dear Half-Mast,

There seem to be several different opinions about the proper unit markings on trailers.

Some say give the trailer the same number as the towing vehicle; others say it gets a number all its own; and others say give it the same number as the towing vehicle but add a "T" to denote trailer. Which is the right way?

WO C. M. O.

Dear Mr. C. M. O.,

According to AR 746-2300-1, the vehicle number will be the sequence number of the vehicle in the normal order of march within the unit to which it is assigned.

Since your trailer is a vehicle, then you give it the next number after the number of the truck that's pulling it.

Half-Mast

A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins.

TECHNICAL MANUALS

TM 1-1R-230-6 Aug.
TM: 3-4240-226-15 Aug Vulcanizer, Protective Mask Fotabloak, Mt.
TM: 5-2815-200-20P Aug Engine, Diesel (Detroit Diesel, DDC, 71).
TM: 5-2805-225-15 Aug Loader, Scoop Type; Tc, Cu Hd Cbnt Mod 55A Mt.
TM: 5-3820-305-20/1 Aug Crane; Rail, 75 Ton Per Hour Eagle Crusher Mod 5370B.
TM: 5-6115-248-20 Aug Generator Set, Diesel 30 KW, AC, US Motors Mod 30, US 16936.
TM: 5-6675-204-15 Aug Mapping and Surveying; Levelsk Mod MA34-3; Relief Goodmeter Sensing Mod Type A.
TM: 5-6675-206-20P Jul Geodimeter; Mapping and Surveying; Sensiks Mod MA34-2A Geodimeter; Retrodirective Prisms, Sensiks Mt Mod Type A.
TM: 5-6675-230-15P Jul Transit, Telescopic, Gurley Mod 132, 132B, 132-F-20, 132-20.
TM: 9-1005-223-13P/2 Aug Caliber .30 US Rifle M1, M1C and M1D.
TM: 9-1005-234-14P Aug Grenade Launchers M1, M7A1, M7A2, M8A1 and M76.
TM: 9-1410-500-20P/1 Aug Guided Missile M3 (Hawk).
TM: 9-1430-510-17/1 Aug Check Prec Ist Radar Set AN/MPQ-3P (Hawk).
TM: 9-2330-212-24P Jul Trailer, M343, M343A1, Low Bed: M24B, M24B1, M46, M46B1, M29C, M29C, M259A1, M259A1C, M34A2, M34A2, M35B1A1, M36B2, M36B1, M47A1, M47, M47A2, M47, M26, M26A1, M26A1C, M46, M25B1, M46, M46B1.

TM: 5-895-241-20P Aug Control Set AN/TSW-8V1.
TM: 11-5965-245-12P Aug Handsets H-73/U, -2A/U, -2B/U, -2C/U.
TM: 11-5965-251-12P Aug Handset TS-383/U.
TM: 11-6115-218-20P Aug Generator, D. C. G-42/U.
TM: 11-6625-240-20P Aug Test Sets TS-27/TSM, TS-278/TSM.
TM: 11-6625-246-20P Aug Test Set, Radio AN/TSM-94.
TM: 11-6625-255-20P Aug Analyzer for Sensitiveness TS-723/U, TS-723A/U, TS-723B/U TS-723C/U.
TM: 11-6625-261-20P Aug Audio Oscillator TS-382A/U, -382B/U.
TM: 11-6625-269-12 Aug Calibrator, Crystal TS-407/U.
TM: 11-6625-397-12P Aug Test Set, Battery AN/TS-U.
TM: 11-6625-441-12, -20P Aug Test Set, Radio TS-1188/AIC.
TM: 11-6720-211-12 Aug Camera Set, Still Picture KS-17A.
TM: 11-6720-215-10 Aug Camera Set, Still Picture KS-7A.
TM: 11-6720-305-20P Aug Projectors, Still Picture AN-41/ AN-42B.
TM: 11-6720-325-20P Aug Printers PH-29, PH-29A.
TM: 11-6740-233-12P Aug Splicer, Photographic Film PA-31/.
TM: 11-6740-204-20P Aug Camera Set, Still Picture KS-41/.
TM: 11-6720-300-20P Aug Identification Sys AN/TPQ-1/, AN/TPQ-1A, AN/ TPQ-1B.
TM: 55-2210-204-20P Aug Lace Dies Tool, Sn/In Gage 44 Ton & 45 Ton, Cat Dly D17000.
TM: 55-2230-205-20P Aug Bolt Motor Tool, Hydraulic 45-Ton Capacity, Hole Mold Corp. Eng 1835, 45 Hp, Kohlmeyer Mod 27AW-TC, Type II Sel/-In Gage Type I, Dam Type II, Foreign.

TECHNICAL BULLETINS

TB 9-1410-250-15/12 Aug Attaching Hardware for Replacing Loose or Damaged Nutplates in Weapons-Section Hawk.
TB 9-2330-210-30/1 Sep 2½ Ton, M135, M35A2 Series, M809 Trucks M23B, M135, M211, M215, M217, M217C, M222, M231, M232 Inspection of steering Tie Rods Arm Studs.
TB 9-2330-212-30/1 Sep Truck ¾, Ton Differential Between Transmissions.
TB 9-2330-212-20/2 Aug Truck, Cargo, Ton and M273 Replacement of 45 Amp-Hour Batteries.
TB 11-6730-241-45/1 Aug Projection Air Motion Picture Sound AN-25/U.
TB CML 85 Sep Calibrator, Radiac, M1.
TB ENG 303 Aug Identification, Surveying Instruments, Federal Class 6675.
TB ORD 260 Aug Ind Comb Engine Application.
TB ORD 1031 Sep Cleaning, Painting Interior of Gasoline Tank Jacks and Tanks.
TB TM 3-4 Aug Jungle Clothing Equipment and Rations.

LUBRICATION ORDERS

LO 5-2655-204-20/1, -2 Aug Generating Plant Cooling Jet Products Model LCN-5.
LO 5-2815-229-20-1, -2, -4 Jul Mounted on Chassis Model W12206 Prime Mover Snowplows, WAUSAU Mod M1123 and Fitch Model RO-10.
LO 5-4310-221-15 Aug Compressor, Rot Air; 125 CFM, 100 PSI Ingersoll-Rand Mod CE8-125.
LO 5-4320-216-15 Aug Pump, Cent Driver Mod-4 Pump and Wilson.
LO 5-4940-201-12 Aug Shop Equipment Orig Set No. 2 Southwest Mod SMGPR.
LO 5-6115-297-15 Aug Generator Set, Gas Eng, 2KW, DC, 12V, 3kW Mounted Leland Ohio Electric Co. Mod LOE-660.
LO 5-8120-201-12 Aug Tank, Storage, Lox, Cambridge Corp Mod 217-30.

MODIFIED WORK ORDERS

MWO 5-6115-213-35/2 Sep Generator Set; 45 KW, Kurz and Mott Model Atex 1.
MWO 9-1450-500-20/3 Sep Loader-Trans Inst of Rel Rear Fender Sup Br.
MWO 9-1450-500-20/5 Sep Ldr-Trans: Inst Bat Box Cover (Hawk).
MWO 9-1450-500-20/6 Sep Ldr-Trans Inst Cover on Index Arm U Switch.
MWO 9-2320-211-20/2 Sep Carrier, Personnel, Armored, M113: Rel of Rebell Arm Sumper Br.
MWO 9-2320-211-20/18 Aug Rifle, Self-Propelled, 106-MM, M50: Inst of Windscreen Br.
MWO 9-2350-214-20/1 Aug Tank, 120-MM Gun, M103A1; Relocating Radio Set.
MWO 10-3930-415-30/1 Aug Tractor, Wrecker, 40Ob6, DM, 6D. Install Modify Gear Cover, Fuel Cap, Filter, Top Coupled Generator, Hood, Steering Gear, Horn, Clutch Housing and Battery Compt.
MWO 11-5821-205-45/1 Aug Frequency Converter-Transmitter CV-431/AR and Oscillator Relay 0-421/AR.

SUPPLY MANUALS

SM 5G 748-CV-434/FSQ Aug Field and Depot Guide Digital, Data CV-434/FSQ.
SM 5G 748 MX-2389/FSG-1 Aug.
SM 5G 748 DA-1197/FSG-1 Aug.

DA FORMS

DA Form 9-31 Aug Herc and Impr Herc Daily Check Sheet.
DA Form 9-32 Aug Herc and Impr Herc Weekly Check Sheet.
DA Form 9-33 Aug Herc and Impr Herc Monthly Check Sheet.
DA Form 9-54 Aug Herc Check Sheet And Missile Mt for Dec Checkout.
DA Form 9-57 Aug Herc Check Sheet Dec Checkout Unit Test Set-81B4A1.
DA Form 9-59 Jun Herc Check Sheet, Launching and Test Rocket Motor.
DA Form 9-90 Jun Herc Weekly Check Sheet.
DA Form 9-93 Jun Herc Weekly Check Sheet Launching Set, Cat Sheet, Prescribed TM 9-1410-250-15/2 Revision of DA Form 9-93, Mar, which is obsolete.
DA Form 9-100 Jun Ajax Daily Check Sheet Track Radar.
DA Form 9-102 Jun Ajax Monthly Check Sheet.
DA Form 9-112 Jun Herc Monthly Check Sheet Launching Set.
DA Form 9-113 Jun Herc Monthly Check Sheet Using Test Set-9025325.
DA Form 9-119, -125 Aug Herc Test Sheet.
DA Form 9-121 Aug Herc System Check Sheet Missile Elect Checkout.
DA Form 9-137 Aug Herc Check Sheet—Missile Body and Rocket Motor Cluster.
DA Form 9-156 Jun Test Shop Check Procedures (Hawk).

NO KIT-BIT BY BIT

Maybe you've had a run in with those Packard electrical connectors on your equipment's waterproof electrical system, and you've been wondering how you can order a repair kit.

To make a long story short—you can't. The individual parts hafta be ordered as separate items.

Before going through the list to pick out the part needed, here are a few hints to check through that'll help with the connectin' business.

1. Pick out the right parts to go with the gage wire to be used (12, 14, or 16 AWG wire).
2. Working on 12-gage wire? Then don't use the plastic sleeve with the male shell, but use washer, FSN 5310-298-8903 instead.

It works like this . . . shove the wire through the male shell and strip off the insulation. Then the stripped wire is put through the small hole in the washer. Now, slip a terminal on the stripped wire . . . and just snug 'em up and crimp or solder 'em in place.

3. The two types of male shells (ribbed & plain version) are to be used for identifying the hookups on polarized units.
4. Knowing that earlier produced female (metal) terminals had a habit of spreading so the male terminal had poor or NO contact at all, a "hog-ring" was added to the female.

The hog-ring does two jobs. It keeps the terminal from spreading and insures a good contact because the terminal remains round.

SO-O-O-O, NEVER, NEVER, MASH DOWN ON THE RUBBER SHELLS TO GET A GOOD CONTACT 'TILL YOU SEE IF THE TERMINAL IS THE LATER VERSION WITH THE HOG-RING . . . MASHING DOWN'LL RUIN AND DEFEAT THE PURPOSE OF THE RING.

5. You'll find two female metal terminals floating around in the system. They both have hog-rings and'll do the job.

The difference lies in the manner of attaching the wire to them.

On the one with the solid sleeve, the wire gets crimped to the terminal. With the other, the larger tabs are bent around the insulated part of the wire and the small tabs bent around the peeled wire . . . then it gets soldered into the terminal.

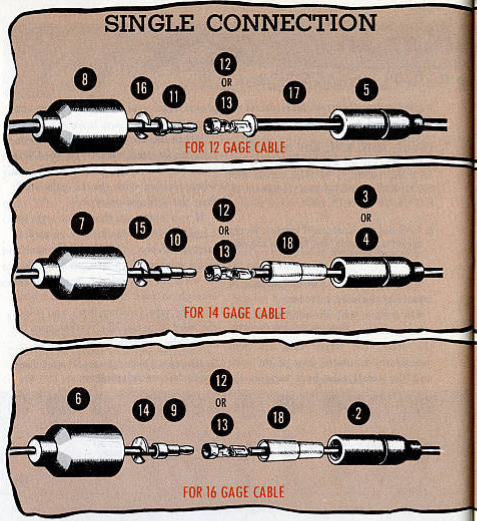
Either the solder or crimp type version can be used with 14 or 16 AWG wire, but the crimped version is better when playing with the 12-gage stuff, than the soldered-on-type.

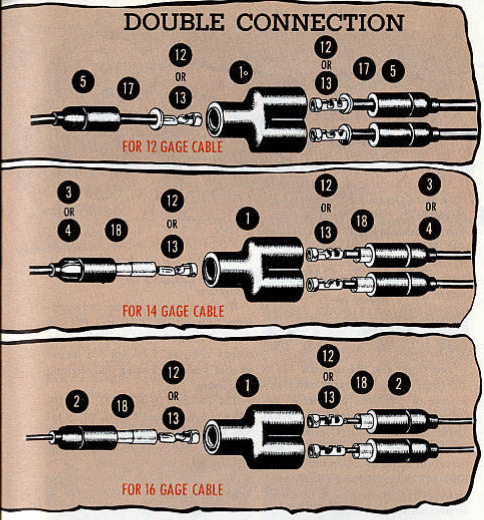
If you hafta use the solder type for 12-gage wire, the tabs can't be used to latch onto the insulation because the small washer FSN 5310-298-8903 must be used. So peel off the insulation far enough to take the washer and bend over the tabs (washer first) and solder the wire in place. The washer goes between the insulation and terminal.

Tie this info in with the following list and it should simplify this connectin' up business.

ITEM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
FSN	5935-699-9004	5975-660-5962	5935-833-8561	5935-399-6673	2590-695-9076	5935-691-5591	1015-833-8566	2590-695-9077	5940-057-2931	5940-057-2929	5940-057-2930	1015-798-2997	5940-399-6676	5310-656-0067	5310-833-8567	5310-595-7044	5310-298-8903	5970-833-8562
NOMEN-CLATURE	Connector Assy "Y"	Shell, Male (Rubber)	Shell, Male (Rubber)	Shell, Male, Ribbed (Rubber)	Shell, Male (Rubber)	Shell, Female (Rubber)	Shell, Female (Rubber)	Shell, Female (Rubber)	Ferrule, Electrical Connector	Ferrule, Electrical Connector	Ferrule, Electrical Connector	Terminal Assy (Female) (solder)	Terminal Assy (Female) (Crimp)	Washer, "C" (Terminal Retaining)	Washer, (Slotted) "C" (Terminal Retaining)	Washer, "C" (Terminal Retaining)	Washer, Plain, (Terminal Retaining)	Sleeve, Insert Plastic
GAGE WIRE IN USE	12, 14, 16	16	14	14	12	16	14	12	16	14	12	12, 14, 16	12, 14, 16	16	14	12	12 (ONLY)	14, 16
ORD PART NO.	7982404	8724494	8338561	7982401	8338569	8724495	8338566	8338572	572931	572929	572930	7982997	8338564	8724497	8338567	8338573	8338570	8338562
TECH SERVICE	ORD	SIG	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD	ORD

MORE





Some of the poop in PS #77, pages 14-15 still holds up. The use of DC4 compound, more formally known as Insulating Compound, Electrical; (Spec MIL-1-8660), for example.

The stuff comes in mighty handy when putting on or taking off the shells. The wire'll slip through the shell easier and makes for a more waterproof set-up. With a bit smeared around the male shell before it's mated to the female shell makes much easier connecting up and when it comes to disconnecting them it's also great stuff.

The compound is found in the supply system and is still Ordnance responsibility. Here's how you get 'em.

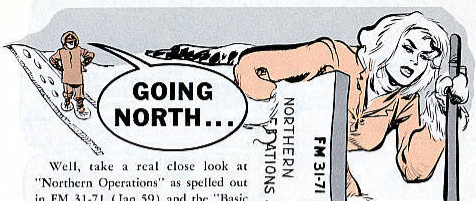
FSN 5970-224-5277 . . . 2-Oz Tube (CHEM)

FSN 5970-224-5276 . . . 8-Oz Tube (CHEM)

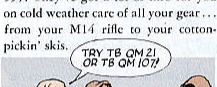
Case you don't have the insulating compound around, might try the cutting oil FSN 9150-234-5198 (QMC), found in the Douglas repair kit.

If pulling on the wires won't do the trick of separating the shells, don't get to bending 'em up and down, but, rather try inserting something down between the two shells—careful like—and pry gently until they can be pulled apart. Handle 'em with care is a good motto to follow when these quick-disconnects are in the picture.

END



Well, take a real close look at "Northern Operations" as spelled out in FM 31-71 (Jan 59) and the "Basic Cold Weather Manual" FM 31-70 (Feb 59). They've got a lot of info for you on cold weather care of all your gear . . . from your M14 rifle to your cotton-pickin' skis.



You might also like to check TM 9-207 (Sept 59) on "Operation and Maintenance of Ordnance Materiel in Extreme Cold Weather" and TM 5-560 (June 52) on "Arctic Construction." Not to mention "Winterization Techniques for Engineer Equipment" in TB ENG 347 (4 Dec 59) and TB ORD 651 (9 Oct 59), explaining use of antifreeze in your vehicles.

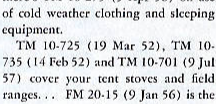
Then of course your TM's on each piece of equipment will include some useful info on cold weather operations.

Take a long peek at some of these personal gear pubs:

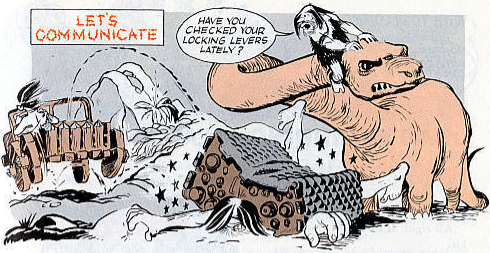
TB QM 21 (24 Dec 59) and TB QM 107 (8 Jul 60) on load-carrying equipment, TB QM 78 (26 Nov 57) on parkas and trousers, TB QM 96 (10 Aug 59) on sleeping bags, TB QM 100 (23 Sept 59) on climbing equipment and TB QM 120 (28 Feb 60) on skis, snowshoes and other snow-country equipment.

Backing up your clothing and equipment TB's are TA 21 (Peace) (14 Dec 60) and FM 21-15 (23 May 56). Then there's TM 10-275 (9 Apr 56) on use of cold weather clothing and sleeping equipment.

TM 10-725 (19 Mar 52), TM 10-735 (14 Feb 52) and TM 10-701 (9 Jul 57) cover your tent stoves and field ranges. . . FM 20-15 (9 Jan 56) is the story on tents and tent pitching.



For some really deep reading on the entire subject, you can look around for DA Pams 70-1 (15 Aug 56), 70-2 (15 Mar 57) and 70-3 (15 Aug 59), which are Volumes 1 to 3 of "The Polar Bibliography" containing cold weather info on equipment performance, operational techniques, experiments and tests.

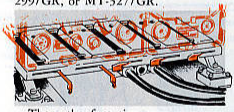


NO DULL, SICKENING THUDS

Flying comm equipment?

Not really, but sometimes your set will take off by itself.

This happens when you forget to lock the handles on the set's mounting . . . whether it's an MT-297/GR, MT-299/GR, or MT-327/GR.



Then, the first time you run your jeep or tank cross-country or stand on the brakes, off flies the radio set. It's not a very pleasant flight because you know it'll end with a crash . . . on the floor or over the side. And sometimes somebody gets clobbered before the landing.

In any event, you can count on something going shopside for awhile. Either the mounting's power cables or cords or the set's receptacles will be aburtin'.

It's easy to make sure your set keeps its place. As the TM's say:

Just pull the locking levers (nine of 'em on the "297", five on the "299" and seven on the "327") out and to the right in a circular motion.

And, when hooking the receiver-transmitter RT-70/GRC to the interphone amplifier, just snap the catches and hooks on both units.

SAD BEGINNING– GLAD ENDING

"LOOK OUT . . . HOLD IT . . . TO THE RIGHT . . . WAIT . . . WAIT . . . WAIT!!"

&%&$&#'&(&$&#'$&#(& $&$&$'

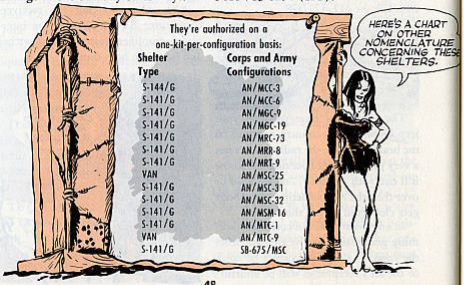
All right. It's too late, now. Get the kit.

And so much for the sad beginning of our story.

It's all about S-141/G and S-144/G electrical equipment shelters that suffer skin punctures during routine maneuvers. Happens when they bump against a knobby tree while being swung up into their deuce-and-half . . . or suffer damage in one of many other ways.

Which can't be helped, of course, but which can—and should—be fixed.

So always be sure your patching kits are ready and handy. And since they weren't included with the new shelters, you have to requisition them separately. The formal name is: Patch Kit, for Shelter, Electrical Equipment, FSN 5410-783-6250 (SIG).



They're authorized on a one-kit-per-configuration basis:

Shelter Type	Corps and Army Configurations
S-144/G	AN/MCC-3
S-141/G	AN/MCC-6
S-141/G	AN/MGC-9
S-141/G	AN/MGC-19
S-141/G	AN/MRC-73
S-141/G	AN/MRR-8
S-141/G	AN/MRT-9
VAN	AN/MSC-25
S-141/G	AN/MSC-31
S-141/G	AN/MSC-32
S-141/G	AN/MSM-16
S-141/G	AN/MTC-1
VAN	AN/MTC-9
S-141/G	SB-675/MSC

Shelter Type	Division Configurations
S-144/G	AN/MGC-17
S-141/G	AN/MRC-54(V)
S-141/G	AN/MRC-69(V)
S-141/G	AN/MSC-29
S-141/G	AN/MTC-3
S144/G	AN/MTC-7
S144/G	SB-611/MRC

With it, a man can slap a rugged, weather-proof patch on the aluminum wall of his hut that'll provide a surface maybe tougher than the wall itself. No need to paint it, either, since the patch dries to an OD color.

All instructions, of course, are right there in the kit. Naturally, you'll want to keep the kit as cool as possible since heat cuts way, way down on the life of the liquids used in the kit.

TAUT FOR TODAY

Yep, that's the thought: taut!

And it suits the purpose today, tomorrow, and any time you're securing a comm shelter to its ¾-ton or deuce-and-a-half truck.

Whether it's an S-144/G or S-141/G or S-89/G shelter—or any of the others.

Naturally, a crew wants the hut to sit tight on the vehicle. And the turnbuckles on the sling are just the thing to provide a good fit. But there's a little matter of making the cables too tight.

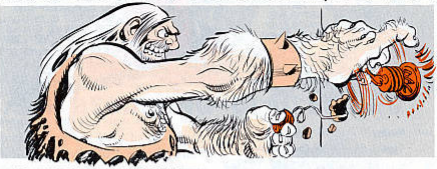
Seems that too much muscle applied to the turnbuckles will produce a turn for the worse . . . by actually buckling the frame of the shelter. That's right. It's possible to crank on enough foot-pounds of pressure to bend the beams.

So, taut's the word.

When you're securing a shelter to the bed of a truck, take up on the four turnbuckles as tight as possible by hand. Then take 'er up another half-turn to make things just right.

Use a rod, bar, or what have you, to do the job. Just slip it through each turnbuckle for leverage, and make the extra half-turn.

PROPER PLUG PRESSURE, PLEASE

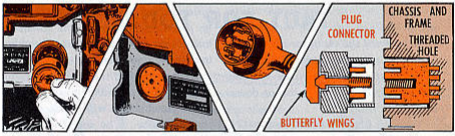


POWER-IN or POWER-OUT.

Well, whichever way your plug connector is carrying the current—in or out—it's got one thing in common with just about every similar plug in just about every other piece of commo equipment.

It has to be screwed up just right. Not too loose . . . not too tight.

The threaded hole in the center of those plugs is put there to accept the screw in the center of the cable connector. And when the connector is snugged up finger-tight with the butterfly wings, your power is ready to flow.



But sort of bear one thing in mind. Those plug connectors are not as solid a part of the control panel and chassis as they might look. In fact, they themselves are plugged in. And serve, so to speak, as a connecting link 'twixt cable and chassis.

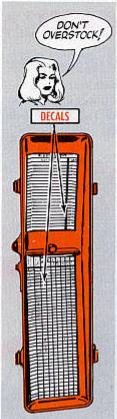
So when you screw in the cable connector, you're only screwing into the plug connector—and not directly into the chassis itself. That threaded hole does not end inside the chassis, but inside the plug.

Any strong-arm technique in tightening the two will serve one purpose—but defeat another. It'll put them together for sure, but could wrench the plug connector loose from the chassis.

Too much muscle when you tighten could easily bend and break inside connections . . . rupture wiring circuits . . . and lead to a loose and maybe missing plug.

Firm but not too firm, then, is the PM message for tightening up on those plugs.

STICKY OR NO STICKY



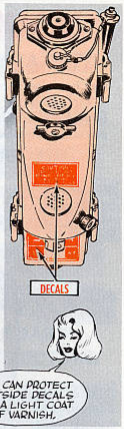
Getting stuck with a sticky problem isn't unusual for some people.

But some of the Perk-6 Joe's are muttering to themselves about "unsticky" problems.

The modification and calibration decals inside their Receiver-Transmitter RT-196 (*)'s just don't stick. It seems the decals—FSN's 7690-257-4855 and 5820-537-3684—can't be stored much more than a year. After that their adhesive backing breaks down.

The best way to keep this from happening is to requisition only as many as you figure you can use right away.

Those decals on the outside don't always get TLC (tender loving care) so they must be kept from peeling, scratching, or being torn off. You can give 'em the protection with a light coat of Varnish, moisture and fungus-resistant (MIL-V-173) FSN 8010-664-4747 (Eng).



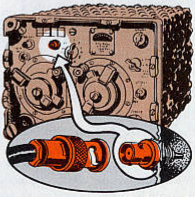
GO EASY

RT-66's through 68's have a lot of sensitive parts that must be treated with kid gloves.

But there's one—the antenna connector (J-307)—that demands even more.

It's made of brass, and it can be knocked out of line by the slightest bump. And you won't be able to hook up the antenna.

The only way to guard against this is by being real careful and treating that little connector as if it were your very own.



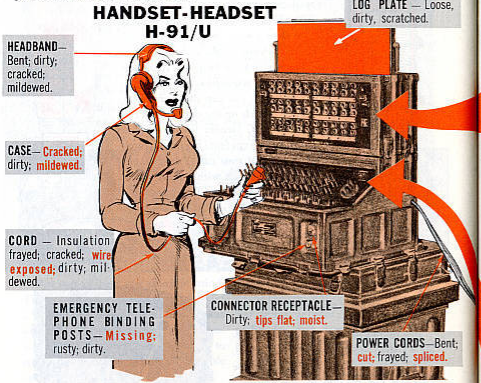
YOUR SB-86/P MANUAL

Buzzzzzz!

Hold it! No need to run for cover. That bee-like sound tells you another message is coming through your SB-86/P manual telephone switchboard.

Top priority or just routine, as the case may be, these calls will keep coming through only as long as your switchboard gets its share of PM. This list of checkpoints can help handle that chore.

HANDSET-HEADSET H-91/U

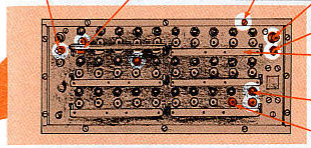


Before casting your eyeballs at the switchboard's inside parts, take a gander at the outside of its cover assembly. Check for any dents or bends. No matter how slight they may appear, they can let water reach the inside if your switchboard gets caught in an unexpected downpour.

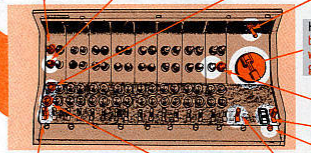
While making the checks, remember the items in **bold type** are real serious and should be corrected before you start pushing plugs again.

TELEPHONE SWITCHBOARD

SWITCHBOARD SIGNAL ASSEMBLY TA-207/P (FIELD JACK SECTION)



MANUAL TELEPHONE SWITCHBOARD SECTION SB-248/P (KEYSHELF SECTION)



25 MORE

POWER SUPPLY PP-990/G

PUBS AND FORMS — TM 11-2134 (Sept 55) with Changes 1 and 2, and DA Form 11-246.

PANEL COVER—Bent; gasket hardened; cracked, spare fuses missing; hinge broken.

SPARE FUSES—Missing.

RINGING SUPPLY INDICATOR LAMP — Doesn't work.

INTERNAL SWITCHBOARD BATTERY SWITCH—Doesn't operate.

INTERNAL-EXTERNAL BATTERY SWITCH — Doesn't work.

RINGING SUPPLY FUSE — Missing; blown or broken.

BATTERY CHECK SWITCH— Doesn't operate.

BINDING POSTS — Missing, wires not seated properly; dirty; springs weak.

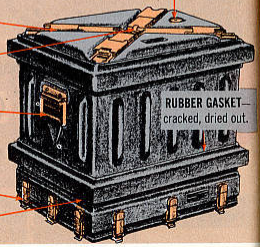
CARRYING HANDLES— Missing; bent; broken.

VOLT BATTERY SUPPLY FUSE— Missing; blown or broken.

VOLTMETER— Doesn't work; window cracked, broken, dirty.

TRUNK-TYPE LATCHES — Missing; bent; broken.

OUTER COVER ASSEMBLY



As the TM says, electrical contacts should be cleaned with a burnisher or a toothpick dipped in any authorized contact cleaner. One of 'em is ordinary type cleaner which goes under FSN 7510-527-1458 (QM) for a 4-oz container

You can also use Cleaning Compound, as TB Sig 327 (24 Jan 61) says. You order it from QM like so:

1 Pint	FSN 7930-395-9542
1 Gallon	FSN 7930-396-3420
5 Gallons	FSN 7930-395-9541

To clean other than electrical contacts, use a clean, dry, lint-free cloth or dry brush dipped in dry-cleaning solvent.

If you use compressed air, 60PSI should easily be enough to chase dust from hard-to-get-at spots. But don't go any higher than that or you could do more damage than good.

END

WELDERS, WATCH IT!

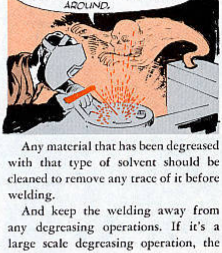
Maybe you welders don't know it, but you should keep an eye on the location of your electric arc welder when you're using it. Could be that it's doing you dirt without your knowing it.

How so? If there are chlorinated solvents such as carbon tetrachloride trichloroethylene near by, the ultraviolet rays from the arc can act on the vapor from the chlorinated solvent to form highly poisonous phosgene gas.

Phosgene is irritating to the lungs and can cause serious lung damage.

You can't tell right away just how much damage the phosgene has done because the full effect usually won't show up until three or four hours after you've been exposed to it.

To play it safe, keep solvent containers closed and out of the way when you do any welding. It's best not to take a chance with cans that you think might be empty. Keep them out of the way too.



Any material that has been degreased with that type of solvent should be cleaned to remove any trace of it before welding.

And keep the welding away from any degreasing operations. If it's a large scale degreasing operation, the electric arc welder should be at least 50 feet away from it.

M2A1 PORTABLE FLAME THROWER

Test Notes and safety caution—

Your M2A1 portable flame thrower is now due a hydrostatic pressure test every six months. And, perhaps even more often—if you're using it real regular-like.

This kind of pressure-testing business, as you know, is a chore for the Chemical maintenance support people, so you'll be hearing from them on it real soon.

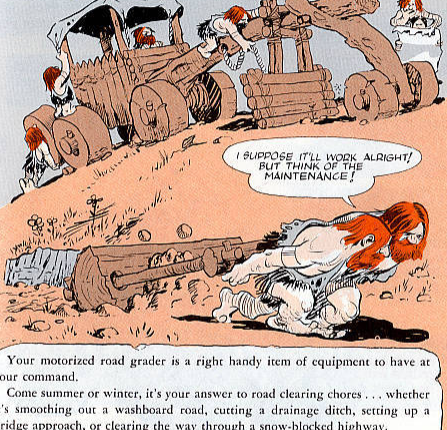
They'll put your portable's fuel tank, hose and gun through a pressure test of 625 PSI, and its pressure tank will be tested to 3,000 PSI.

The six-month test applies to all M2A1's in the field, and those in depot stocks won't be issued till they get pressure-tested. Read all about it in Change 3 to TM 3-376.

And, here's a fire-guard reminder: When you're getting set-up for a practice run with the M2A1, always check your standby CO_2 fire extinguishers . . . try 'em out . . . before you fire the M2A1.

SMOOTH OUT THE HUMP . . .
BE YOUR OWN INSPECTOR ON . . .

YOUR ROAD GRADER



Your motorized road grader is a right handy item of equipment to have at your command.

Come summer or winter, it's your answer to road clearing chores . . . whether it's smoothing out a washboard road, cutting a drainage ditch, setting up a bridge approach, or clearing the way through a snow-blocked highway.

Keeping it in ready-to-go shape is the first step in getting your job done. And, your PM services should take care of that.

At the same time, this regular preventive maintenance will keep you a couple of jumps ahead of the inspector and will give you gig-proof rig.

The real serious conditions—in **bold type**—will make your equipment unsafe to operate or will cause additional damage to your rig when it's operated.

Here's a rundown on your Huber-Warco grader, Model 4D. You can use it to check out the graders in your outfit.

MORE

GENERAL APPEARANCE

AIR CLEANER — Loosely mounted. Unserviceable. Oil level too high, too low. Precleaner dirty. Connections loose.

MUFFLER, EXHAUST PIPE — Holes, dents, cracks. Loose. Flutter valve sticks. Excessive rust, corrosion.

HYDRAULIC FLUID—Level too low. (Should be three inches from top of tank). Contaminated.

HOOD, SIDE PANELS, REAR PANELS, SKIRTS, FILLER PLATES—Dents, cracks, breaks, elongated mounting holes. Missing, loose assembly bolts, nuts, screws. Paint chipped, flaked. Metal rusty.

WIRING—Badly worn, frayed, cracked. Connections loose, broken, corroded. Insulation oil-soaked.

ANTI-FREEZE (When required) — Not enough for temperature. Low.

FUEL-HYDRAULIC TANK—Leaks. Mounting bolts loose, missing. Filler cap loose, poor fit. Gasket cracked, broken. Air venthole clogged. Fuel strainer dirty. Glass broken, missing on gage. Gage defective.

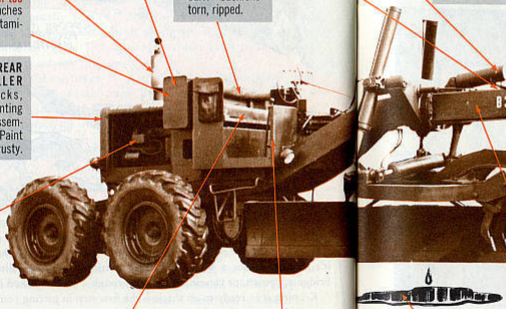
STARTING AID—Lines, connections leak, broken. Lines clogged. Loosely mounted. Lever broken.

LIGHTS (HEAD, TAIL, FLOOD, BLACKOUT) — Cracked, missing, broken lenses. Lamp burned out, defective, missing. Molding, inner rim damaged. Wires broken, loose.

U. S. ARMY, UNIT MARKINGS —Missing, incorrect, not readable.

SEAT—Cushions torn, ripped.

FIRE EXTINGUISHER—Missing. Insufficient charge. (Judge by sound and weight). Corrosion. Insecure mounting. Defective.



CLEANLINESS—Mud, crum caked on. (Could interfere with operation). Grease, oil slicks, objects on cab floor. Excessive oil, dirt, grease on engine exterior.

I. D., MANUFACTURER'S, INSTRUCTION PLATES-Missing, loose, wrong info, not readable, painted over.

LEAKS—Look for source of grease, oil slicks on ground underneath equipment.

FRAME—Bent, cracks, breaks. Missing, loose nuts, bolts, screws. Broken welds. Out of alinement.

TOOLS, EQUIPMENT — Missing, rusty, unserviceable. You should have one each of the following:

FSN	ITEM
4930-141-8311	Hose Assy, Grease Gun
4930-360-2801	Grease Gun, Hand
4910-273-3662	Gage, Tire
5120-224-4047	Hammer, Hand
4930-273-3644	Oiler, Hand
5120-223-7397	Pliers, Slip Joint
5120-234-8910	Screwdriver, Flat Tip
5120-184-8679	Wrench, Box, Offset
5120-264-5211	Wrench, Box
5120-264-3796	Wrench, Open End, Adj.
5120-277-9818	Wrench, Open End, Fixed

TOOL BOX—Cracks, dents, corrosion. Hinge broken.

PUBLICATIONS—Missing, unserviceable. (You should have: TM 5-3805-210-10, -20, -20P; LO 5-3805-210-1, -2; Standard Form 91.

TIRES — Air pressure too high, too low. (Should be 25 pounds). Excessively worn. Cuts, breaks, missing valve caps.

ENGINE

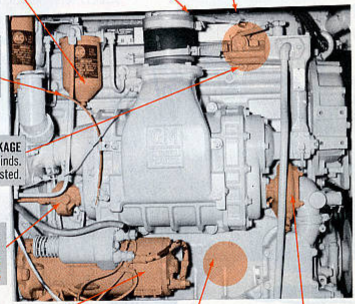
DIESEL FUEL PRIMARY, SECONDARY FILTERS—Housing, lines, connections loose. **Leaks.** Fuel pressure too low. (Should have 40-60 pounds pressure). Filters dirty, clogged. Water, sediment in housing.

VALVE MECHANISM—Excessive tappet noise, loss of power. Incorrect gapping. (Should have 0.009-in clearance). Rocker arms, out of adjustment. Cover gasket defective.

NOZZLES, INJECTORS — **Leaks.** Dirty. Sticking. **Fuel passages plugged.**

THERMOSTAT—Loose housing bolts. **Defective. Corroded.**

GENERATOR REGULATOR—Loose mounting. Wiring, connections loose. **Not adjusted properly.**



FUEL LINES, FITTINGS—**Leaks. Damaged, loose connections.**

GOVERNOR, LINKAGE—Linkage bent, binds. Not properly adjusted.

FUEL TRANSFER PUMP—Loose mounting. **Leaks. Defective gasket.**

CRANKING MOTOR — Loose mounting. **Broken, loose wiring, connections.** Commutators, brushes worn, dirty. Spring tension, brushes loose. Terminals corroded.

CRANKCASE—**Leaks. Oil level** too high, **too low.** Dipstick fits loosely. Filler tube cap loose, dirty. Strainer dirty, clogged.

WATER PUMP—**Leaks.** Cracks, breaks. Loose bolts, capscrews. **Excessively worn, corroded. Damaged seal.**

CYLINDER HEAD, MANIFOLD, GASKETS—**Leaks, breaks, cracks. Missing, loose mounting bolts. Damaged threads. Defective gaskets.**

PRIMARY, SECONDARY OIL FILTERS, OIL COOLER — **Leaks.** Dirty. Clogged. Loose mounting. Defective gaskets. **Cracks, breaks in cooler.**

GENERATOR—Loose mounting. Loose wiring, connections. Commutators, brushes worn, dirty. Spring tension, brushes loose. Terminals dirty, corroded.

PULLEYS—Bent, cracked, chipped, out of alinement.

FAN, SHROUD, GUARD —**Bent, loose. Missing, loose bolts, capscrews.** Blade not alined.

OIL LINES, FITTINGS—**Leaks. Loose, damaged connections, fittings, grease cups. Defective oil, grease seals.**

HOSES, FITTINGS — **Leaks.** Loosely mounted. Hose spongy, swelled. (When engine is running). **Clamps missing, broken, loose.**

RADIATOR — **Leaks. Coolant level low.** Clogged. Loose, missing mounting bolts. **Coolant temperature too high,** too low. Coolant dirty, rusty, contaminated.

FAN, GENERATOR BELTS—Worn, cracked, frayed. Out of alinement. **Tension too tight, too loose.** (Should have ¾-in deflection). Not matched.

MORE

GEAR HOUSING— **Cracks, breaks, leaks.** Missing, loose nuts, bolts.

UNIVERSAL, BALL JOINTS— **Excessively worn, damaged, bind.**

STEERING GEAR ASSEMBLY — **Steering gear, tie rod ends, steering arms, drag link ball joint, steering knuckle pins excessively worn.** Mounting nuts, cotter pins, bolts loose, missing. **Shimmy,** hard steering.

GEARS, PINIONS **Excessively worn, damaged.**

BEARINGS, SHAFTS— **Control arm shaft, bearings excessively worn.** Missing, loose bolts, capscrews. **Bent, twisted control arms, shafts.**

FRONT WHEELS — Missing, loose rim lug nuts. **Wheel bearing excessively worn, damaged.** Rim damaged. Excessive toe-in. (Should be ⅛-in).

FRONT AXLE ASSEMBLY — **Cracks, breaks.** Out of alinement. **Excessively worn axle pivot bearing, front wheel leaning bearings. Front leaning wheel yoke damaged, excessively worn.** Missing, loose mounting bolts.

HYDRAULIC HOSES, LINES, FITTINGS — **Leaks. Loose lines, fittings.** Damaged threads.

HYDRAULIC CYLINDERS, VALVES — **Leaks. Loose lines, fittings. Hydraulic lift cylinder, side shift cylinder, leaning wheel cylinder, scarifier cylinder, steering cylinder and valve defective.**

GRADER

PRIMER — Lines, connections leak, damaged. Loose mounting.

HYDRAULIC OIL FILTER— **Dirty. Clogged with sludge.**

BATTERY CHARGING RECEPTACLE—Cracks, breaks. Damaged, missing receptacle cover. **Broken cable leads.** Frayed insulation, cable leads.

BATTERIES, CABLES, BOXES—**Cracked, leaking cases.** Cables, terminals, strips dirty, corroded. Cables frayed. **Specific gravity low.** (Should be 1.225 or above). **Electrolyte level low.** (Should be above the plates and slightly below the cell cover). Loosely mounted. **Filler caps missing,** cracked. **Vent holes plugged.**

TOW HITCH, PINTLE HOOK—Cracks, breaks. Missing, loose bolts.

HYDRAULIC PUMP, DRIVE— **Missing,** loose hardware, **lines, fittings.** Loose mounting. **Leaks.**

HYDRAULIC BRAKE MASTER CYLINDER — **Fluid level low.** (Should be at least half-full).

TRANSMISSION—Missing or loose mounting and assembly bolts. **Oil leaks.** Breather pipe dirty, cracked, loose.

REAR AXLE ASSEMBLY— **Leaks.** Missing, loose bolts.

TANDEM DRIVE— **Oil leaks.** Missing, loose cover-capscrews. Cracked gasket.

REAR WHEELS— Missing, loose nuts, bolts, lock.

MORE

CONTROLS, INSTRUMENTS

PANEL LIGHT—Cover, missing, cracked, dented. Defective, burned out.

WIRING, SWITCHES—**Contacts, connections** loose, corroded, loosely mounted, **broken.**

GAGES — Cracked, broken, missing glass. Loose mounting. **Wrong reading.** (Oil Pressure Gage — Should read 30-60 PSI when operating. Water Temperature Gage — Should show 160°-180° F when operating. Fuel Pressure Gage — Needle should move to "Green" idle when started, then move to "Run").

METERS — Cracked, broken, missing glass. Loose mounting. **Wrong reading.** (Hourmeter—should record hours of operation. Ammeter — should show reading in "Charge" range).

HANDBRAKE—**Fails to hold. Drags.** Worm lining. **Broken, bent linkage.** Improper adjustment.

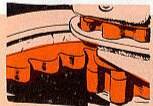
SERVICE BRAKE — Grabs, squeals, **fails. Leak in hydraulic system.** Greasy, worn, dirty lining. **Not adjusted properly.**

MASTER CLUTCH — **Slips.** Connecting pins, bolts in pedal linkage loose, bind.

LEVERS, PEDALS —Worn, damaged. Missing, loose pins, nuts, bolts, cotter pins.

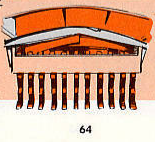
CONTROLS, LINKAGES — **Worn excessively.** Damaged. Missing, loose pins, clevises, nuts, bolts, cotter pins, locks. Linkages bind, bent.

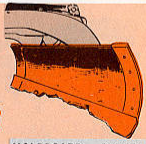
EARTH-WORKING ATTACHMENTS



CIRCLE—**Defective hydraulic motor. Defective circle turn gearcase.** Improper adjustment of wear pivots. Not lubed properly. Excessive side, vertical play. **Cracks, breaks, distortion.**

SCARIFIER—Loose, missing mounting bolts. Cracks, breaks. Excessively worn, damaged teeth. **Defective drawbar cylinder, lift shift assembly.**





MOLDBOARD — Cracks, dents. **Cutting edge, end bits cracked, excessively worn,** loosely mounted.

END

No sweat with CF3Br's

If you've been babying your CF 3Br fire extinguisher (as per PS 106), you can relax now. The cylinders are NOT shatterable and they can stand up to heat as good as any other extinguisher. But you DO want to make sure they're not re-charged with CO_2 by mistake . . . and they should not be re-charged by CO_2 facilities. Later tests seem to indicate that's what caused the earlier trouble. And remember the safety disc designed for the CF 3Br is the **only** one to be used.

Same story--new SB

PS 106 explained the aircraft modification kit story, according to SB 1-15-9, dated **28 February** 1961. The story hasn't changed much, but it's spelled out much clearer in the latest SB of the same number. This one's dated **18 August** 1961.

Useless periscope

Some recently issued M8 tank bulldozer kits, FSN 2590-838-1800, for M48 series tanks, included the M14A1 periscope. If you got one of these scopes, give it back. You need it like a third head. The M14A1 periscope won't fit your tank. Use the M27 periscope which is in your M48 OEM.

M103A1 tank topic

On the M103A1 120-mm gun tank you don't use the commander's control handle if the gunner's control handle wiring harness is disconnected. If you tried it you couldn't control the movement of the gun or turret. TM 9-2350-214-10 (Dec 60) has the dope on this on page 66.

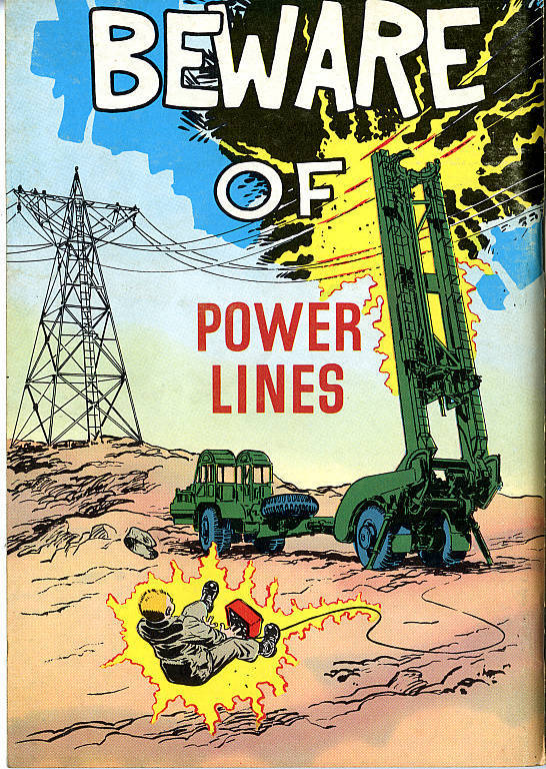
Frozen batteries?

Frozen batteries on a vehicle spell T-R-O-U-B-L-E. Gradually thawing them out like it says to in TM 9-6140-200-15 (July 58) might save them. A better way is to keep them charged. A fully charged battery can take 90-degree-below-zero weather without freezing, but a run-down battery might freeze at 32° above zero. Check the charge in your batteries now . . . it might save you some real grief.

Repair limits

Repair limits based on age now are found in AR 750-2300-7 (23 Jun 61) for most military transport vehicles. AR 750-2300-11 covers the new M151 ¼-ton truck, and limits for towed vehicles are in AR 750-2300-9. And, to get the full story, you'll need AR 742-2300-1 w/changes thru Change 4 (6 Jun 61).

Would You Stake Your Life on the Condition of Your Equipment?


BEWARE
OF
POWER
LINES